Los Angeles County Significant Ecological Area Update Study 2000

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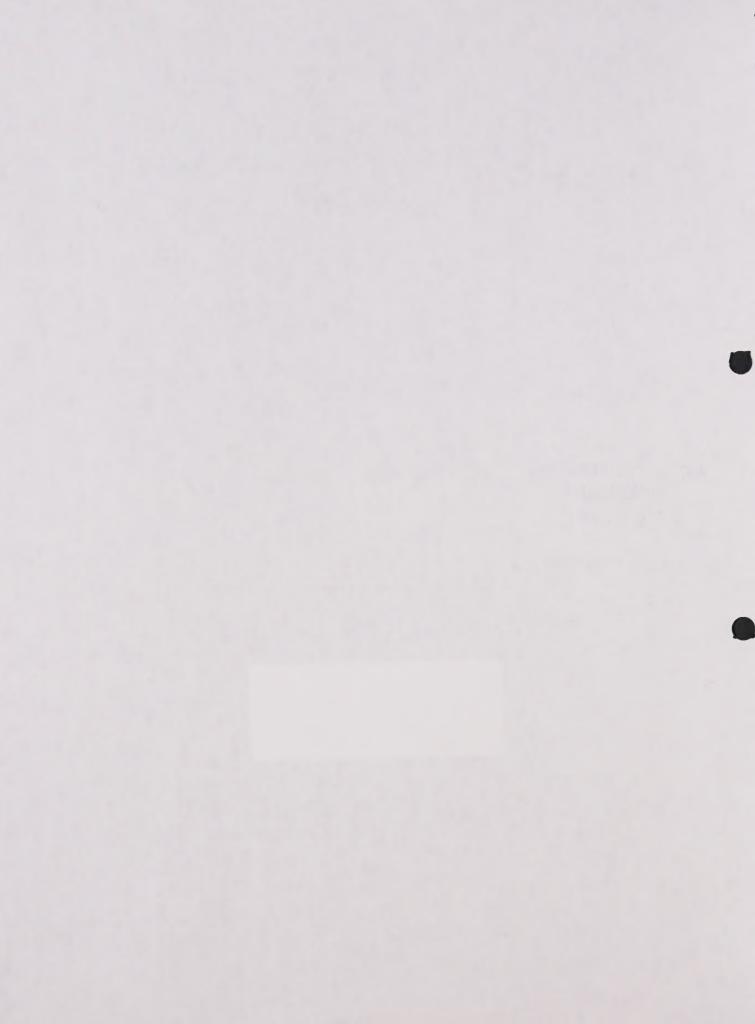
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BACKGROUND REPORT

This document does not contain the following Appendices: C, D, E, F, & H.

Los Angeles County, California





Los Angeles County Significant Ecological Area Update Study 2000



BACKGROUND REPORT

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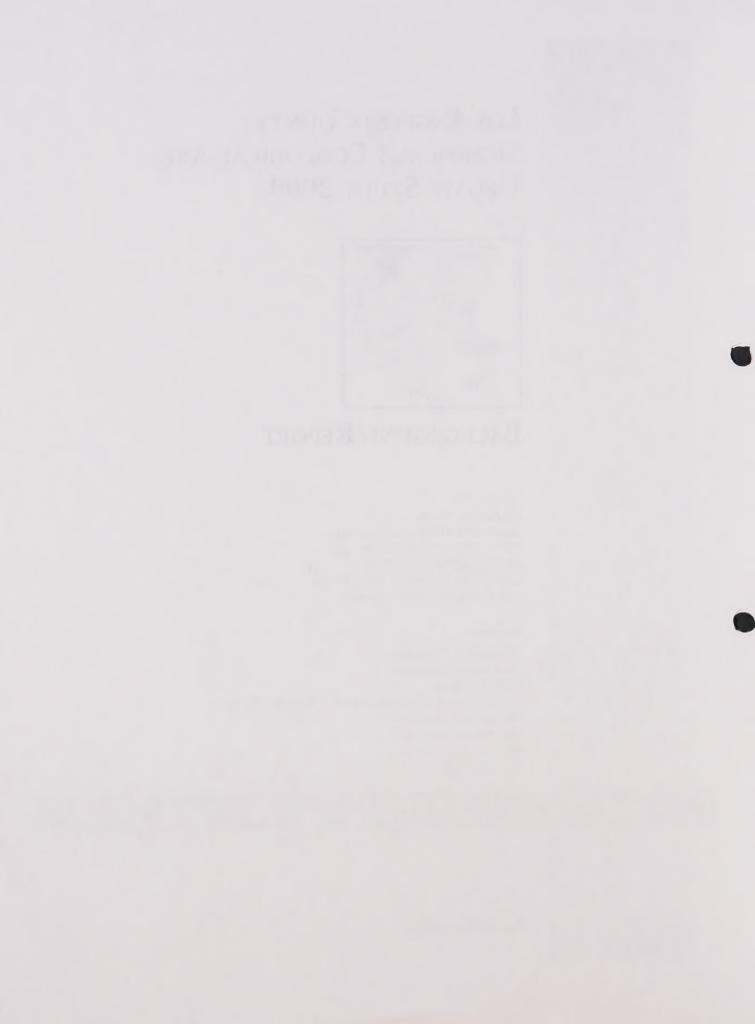


TABLE OF CONTENTS

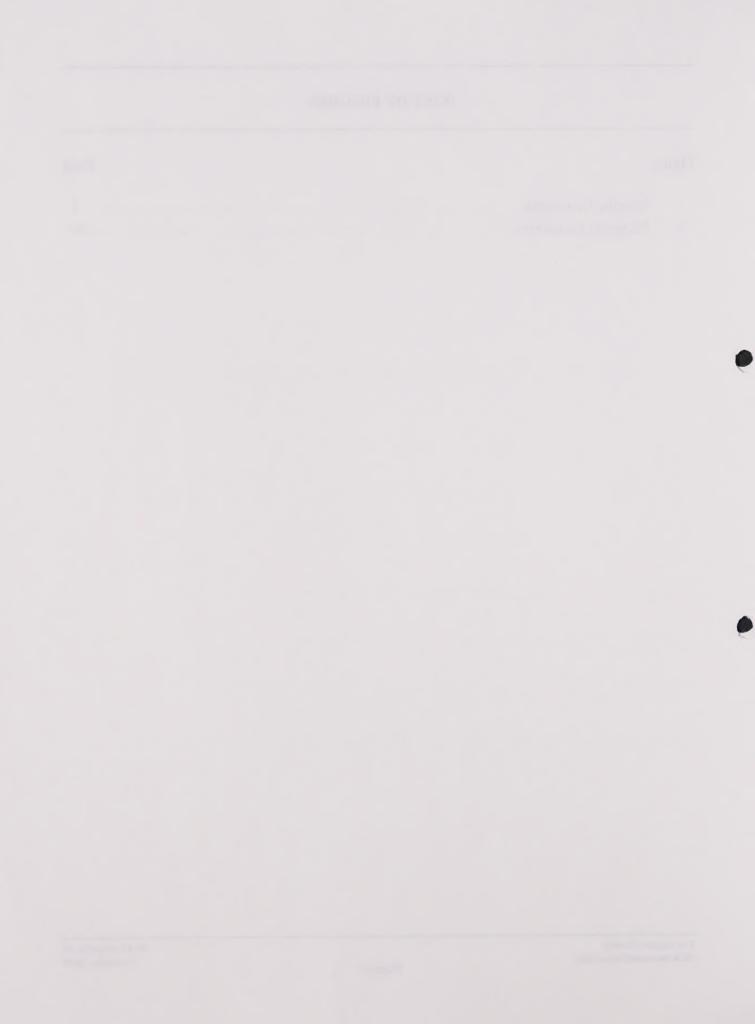
		Page
EXE	ECUTIVE SUMMARY	iv
LOS	S ANGELES COUNTY SEA UPDATE STUDY 2000 BACKGROUND REPORT	. 1
1.	INTRODUCTION	1
	1.1 PURPOSE	1
	1.2 BACKGROUND AND HISTORY	1
	1.3 GEOGRAPHICAL SCOPE	2
2.	STUDY OBJECTIVES	4
	2.1 A HISTORICAL PERSPECTIVE	4
	2.2 Expanded Objectives	6
3.	SELECTION CRITERIA	7
	3.1 1976 CRITERIA	7
	3.2 UPDATED CRITERIA	8
4.	IDENTIFICATION AND DELINEATION OF PROPOSED SEAs	. 14
	4.1 OUTREACH PROGRAM	. 14
	4.2 Database/Literature Review	. 15
	4.3 EXISTING SEA REVIEW	. 15
	4.4 AERIAL PHOTOGRAPHY	. 16
	4.5 FIELD STUDY	. 16
5.	PROPOSED SEAs	. 17
	5.1 CANDIDATES	. 17
	5.2 CONCLUSIONS	. 18

TABLE OF CONTENTS (continued)

		Page
6.	RECOMMENDATIONS FOR IMPLEMENTATION	. 26
	6.1 COMPLIANCE WITH FEDERAL AND STATE LAW	. 26
	6.2 Interpretation of Mapping	. 27
	6.3 SEATAC REVIEW	. 27
	6.4 COMPREHENSIVE LAND USE MANAGEMENT PRACTICES	. 28
API	PENDIX A: 1976 CRITERIA FOR SELECTING AND CLASSIFYING SEAS	
		A-1
API	PENDIX B: CITY AND COUNTY SURVEY RESPONSES	B-1
API	PENDIX C: SEA UPDATE STUDY NOTICE	C-1
API	PENDIX D: PUBLIC MEETING MATERIALS	D-1
API	PENDIX E: CITY AND COUNTY QUESTIONNAIRE FORM	. E-1
API	PENDIX F: COMPREHENSIVE STUDY SOURCES	. F-1
API	PENDIX G: SEA NOMINATION TABLE	G-1
API	PENDIX H: COMPREHENSIVE FLORAL AND FAUNAL	
	COMPENDIUM	H-1

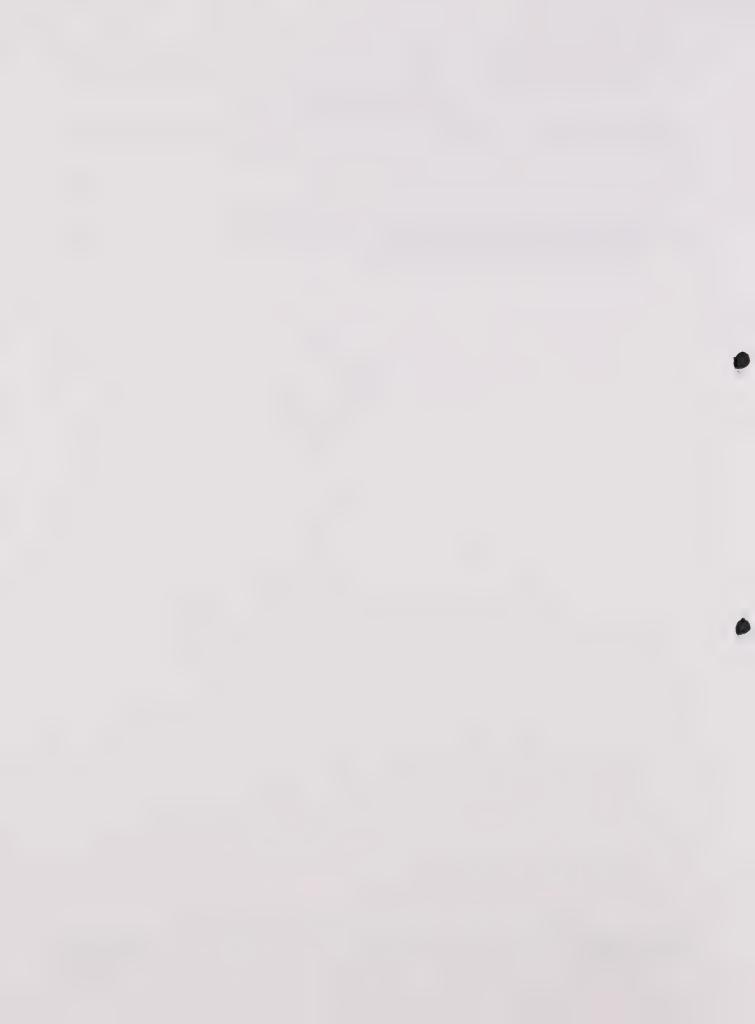
LIST OF FIGURES

Figur		Page
1	Existing Boundaries	. 3
2	Proposed Boundaries	20



LIST OF TABLES

Γable		Page
1	Los Angeles County Sea Update Study 2000 Selection Criteria	11
2	Proposed Versus Existing Sea Boundaries	21



EXECUTIVE SUMMARY

The Los Angeles County Significant Ecological Area (SEA) Study has three purposes: To evaluate existing SEAs for changes in biotic conditions and consider additional areas for SEA status within unincorporated Los Angeles County; to delineate SEA boundaries based upon biotic evaluation; and to propose guidelines for managing and conserving biological resources within these areas.

The "original" SEA report was prepared in 1972 by a committee of scientists from the Los Angeles County Museum of Natural History and local academic institutions. This was done as a background study for the 1973 County General Plan. A second SEA study was completed in 1976 by England and Nelson, Environmental Consultants. The 61 SEAs existing today represent the findings of the 1976 Study, as amended through the adoption of a revised General Plan in 1980. After 20 years, it is necessary to re-evaluate the SEA program as part of the next General Plan amendment.

As in 1976, the underlying objective of the SEA program remains the preservation of biotic diversity. Following this objective, it is crucial to identify and designate as proposed SEAs areas that possess examples of biotic resources that cumulatively represent biological diversity. Equally important, this objective has been expanded to include the future sustainability of this diversity through the application of more current practices in conservation planning, primarily by consolidation into larger interconnected SEAs.

The criteria used to identify prospective SEAs were similar to those used in 1976 by England and Nelson. Of the original eight criteria, minor modifications were made to one, and two were omitted from this study without loss to the range of biological diversity subject to this study. The methods used to identify and delineate proposed SEAs was multi-faceted, including: a broad outreach program focused in the government resource agencies, academic institutions, conservation groups, and the general public; a comprehensive database and literature review; an evaluation of existing SEAs in the unincorporated County; the interpretation of aerial photography; and, field study.

The SEA study focused on existing SEAs, within the unincorporated county jurisdiction, and areas nominated for SEA status. Significant Ecological Areas located within cities were not studied, though this analysis recommends that the boundaries of these areas be retained. Significant Ecological Areas remaining within the unincorporated area were consolidated into twelve new areas. These areas were connected to enhance sustainability and biological diversity. As a consequence, the proposed acreage of these areas covers a total of 442,983 acres (unincorporated). This is a

substantial increase in comparison to the 176,174 acres (unincorporated) of SEAs previously designated in 1980 County General Plan.

The proposed SEAs in this study were based on scientifically-grounded concepts regarding their size and connectivity. Most do not focus on a single resource or habitat type. Where feasible, these areas form linkage systems which should greatly improve the probability of achieving the expanded objectives of this study, the preservation of biological diversity in Los Angeles County.

LOS ANGELES COUNTY SEA UPDATE STUDY 2000 BACKGROUND REPORT

1. INTRODUCTION

1.1 PURPOSE

The Los Angeles County General Plan provides guidelines and policies for decision-making regarding new development. As mandated by the State of California, every city and county must adopt and periodically update a comprehensive long-range general plan for physical development within its jurisdiction. The elements of this plan include land use, circulation, housing, safety and noise, open space, and conservation. As part of its General Plan Conservation/Open Space and Land Use elements, Los Angeles County has identified and adopted policies for "Significant Ecological Areas" (SEAs) for certain areas. It has been 20 years, however, since elements of the General Plan, including the SEA component, were last updated.

The purpose of this study is three-fold: First, the study evaluates existing SEAs and additional areas considered for SEA status within unincorporated Los Angeles County. This includes a biotic assessment of existing SEAs for changing conditions, and an evaluation of areas nominated for potential SEA designation. A primary focus of this evaluation is the diversity of ecological resources and potential long-term sustainability. Second, based upon the biotic evaluation, SEA boundaries are delineated to reflect existing conditions or to include additional areas identified with significant ecological resources. Third, this study revisits SEA policies in the Los Angeles County General Plan to propose updated guidelines for managing and conserving resources within these areas. SEAs within city boundaries were not studied, though the analysis recommends that these areas be retained.

1.2 BACKGROUND AND HISTORY

The "original" Significant Ecological Areas report was prepared in 1972 by a committee of scientists from the University of California, Los Angeles, the Los Angeles County Museum of Natural History, and other local academic institutions. That study addressed significant ecological areas that warranted special consideration, due to their high biological resource value. The study served as background for the 1973 Los Angeles County General Plan. The result of that effort was the identification and delineation of 81 such areas throughout the County, including consideration of areas in the Channel Islands and Angeles National Forest.

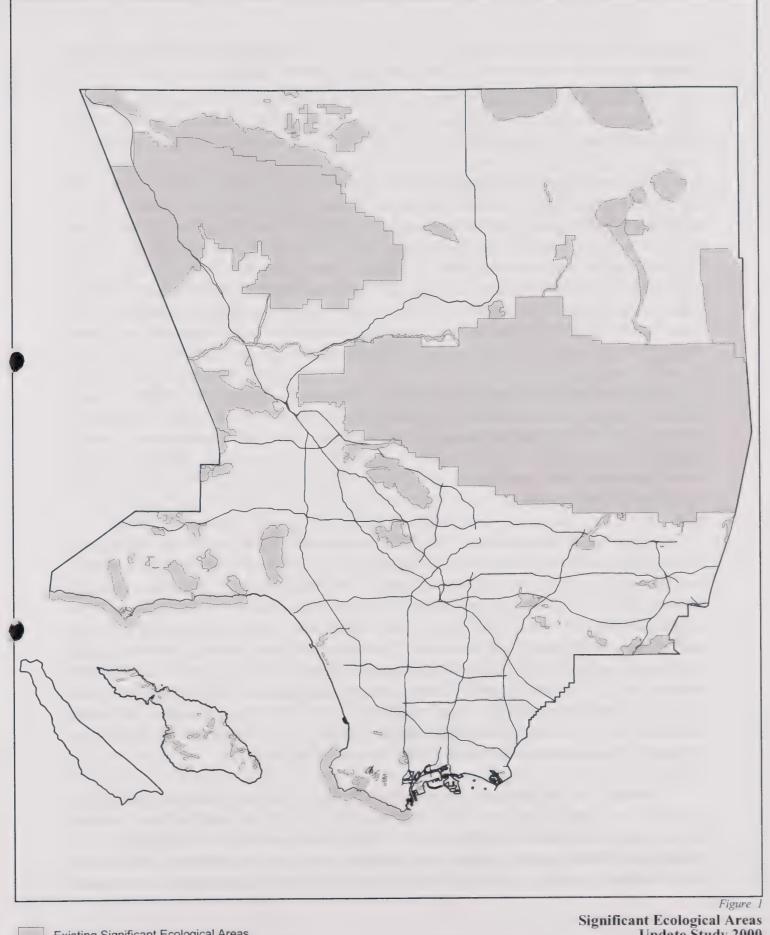
In 1976, a second study was undertaken by England & Nelson, Environmental Consultants as part of the General Plan revision program. For purposes of this effort the Channel Islands and the Angeles National Forest were excluded from the study. At the conclusion of their work England and Nelson identified 62 SEAs in unincorporated Los Angeles County. Subsequently, the county found it necessary to add two SEAs and delete three others prior to the approval of its revised General Plan in 1980. There are currently 61 existing SEAs designated in the county General Plan. These areas are shown in Figure 1, *Existing Boundaries*, on page 3.

Since their adoption in 1980, Los Angeles County has attempted to update the status of existing SEAs. In 1991 the County hired the consulting firm of Michael Brandman Associates to evaluate seven selected SEAs and complete what is referred to as the "Phase I SEA Study." In addition, de facto evaluations and status monitoring have been provided in the form of biological assessments for individual projects within SEAs. This has been done through the County's Significant Ecological Area Technical Advisory Committee (SEATAC) as part of the County's environmental review process. However, these updates did not include evaluations of all SEAs (as in the case of the Phase I SEA Study); nor, did these studies evaluate entire SEAs.

1.3 GEOGRAPHICAL SCOPE

Los Angeles County possesses an extremely diverse topography. Within its approximately 4,000 square miles, it contains coastal areas, islands, plains, mountains, and desert. Elevations within the County range from sea level to over 10,000 feet. Climates range from mild near the coast, to severe in the high mountains and in the desert. Similarly, soils and underlying geology vary according to prehistoric volcanic activity, marine sedimentation and river deposition. This wide variation in physical environments has produced the very unique and diverse collection of biological resources found in the County today.

The geographical scope of this study encompassed all biological resources within the unincorporated lands of Los Angeles County, including Santa Catalina Island. Lands within incorporated cities, San Clemente Island and the Angeles National Forest were not studied except where existing and prospective SEAs identified within County lands overlapped these jurisdictions. While existing and prospective SEAs entirely within the National Forest or cities were not studied, their designation has been retained.



Significant Ecological Areas Update Study 2000 Existing Boundaries

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2. STUDY OBJECTIVES

2.1 A HISTORICAL PERSPECTIVE

The overall objective of the original SEA Study (England and Nelson, 1976), as adopted by Los Angeles County in 1980, was to preserve biological diversity within the areas of County jurisdiction. The England and Nelson study described the County's natural diversity in its introductory chapter, and in its concluding chapter, justified the goal of preserving this diversity. In order to meet this goal, the study sought to identify areas within Los Angeles County which possessed biotic resources which were considered to be uncommon, rare, or unique, were absolutely critical to the maintenance of wildlife, or which represented relatively undisturbed examples of the County's more common habitat types. Such criteria were then used as the basis for designating SEAs.

England and Nelson formulated a set of eight selection criteria with which to classify biological resources and identify SEAs. An extensive literature review was conducted; the 1972 committee of scientists was interviewed; the 81 original SEAs were evaluated; and, a survey questionnaire/nomination form was mailed to a broad list of government agencies, academic institutions, conservation groups and individuals. From these combined efforts a total of 62 SEAs were identified and delineated.

The physical limits determined for each SEA were based upon the data and recommendations received, along with interpretation of topographic maps and high altitude color infrared aerial photography. In general, the boundaries chosen conformed to natural topographic features; however, man-made features and artificial boundaries were used where they coincided with appropriate biological limits. Where SEAs required additional protection from adjacnt land uses, buffer zones were mapped to protect watershed units or to provide distancing from noise, light, traffic and other development impacts. However, the majority of the original SEAs were thought to consist of more or less self-contained units, not in need of additional buffering. It is important to note here, that the underlying ecological concepts employed during the England and Nelson delineations were based upon recently published theories of "island biogeography," which were at that time (1976) prevalent in the emerging field of conservation planning.

Because it was broadly based on published and unpublished information acquired through a comprehensive outreach approach which accessed literature, governmental resource agencies, academia and private conservation groups, the 1976 SEA study provided an adequate basis for the preservation of biotic diversity in the County for many years; and, it established a foundation of thought and early action upon which effective programs to preserve biotic diversity could be built.

However, land use within the County has undergone tremendous growth during the intervening decades, including considerable development within and adjacent to the original SEAs, and as a consequence, many of the original SEAs have been compromised, surrounded or isolated physically by development, resulting in true islands in a sea of land use changes. Additionally, conservation planning knowledge and application processes have changed somewhat in the years since the SEA Study was drafted, and it is clear that the SEA program needs a thorough conceptual review and analysis of the underlying foundations, employing more modern conservation biology perspectives.

The original SEAs served to slow or modify the type of development within their defined boundaries, but over time many of the smaller areas lost the biotic qualities for which they were nominated, and resource values in some larger SEAs may have been reduced or degraded, particularly where all or portions of an SEA no longer lie within the jurisdiction of Los Angeles County. To some extent, the SEA project review process has adjusted to changing conservation strategies and philosophies, generally as a reflection of the knowledge, concerns and abilities of responsible County staff and the SEATAC. However, the static and somewhat isolated physical parameters of the original SEA units limits the abilities of planners and resource agencies to conserve dynamic resources as they occur across the whole of the County landscape.

Increasingly, conservation plans have employed more fluid approaches to conserving the ever-increasing list of sensitive resources (e.g., endangered species, habitats of limited distribution, and "patchy" habitats such as coastal sage scrub). Recalling that the 1976 study applied a pragmatic interpretation of island biogeographic theory to its SEA delineation rationale, the primary principles for determining SEA boundaries were that: 1) species extinction rates are lower on larger islands than smaller islands; and, 2) isolated habitat areas have less opportunity to regain species by recolonization from other areas. These principles have moved from theory to demonstrated fact during the intervening years, but even as we come to understand that conserving intact biotic diversity requires providing very large, physically connected parcels, land use changes were dramatically reducing the natural open space remaining within the County. When England and Nelson translated the early biogeographic concepts into SEA design (that is, that large SEAs were better than small SEAs, and SEAs closer to the National Forest and other expanses of open space were better than SEAs placed farther away), they did not foresee the rates of growth which have occurred within the County, and despite what seemed at the time to be an adequate application of the theory, they created SEAs which have over time proven to be either too small to conserve habitat biodiversity internally, and/or too distant to provide essential connectivity between them.

Another area of concern not anticipated within the 1976 England and Nelson study is the issue of land stewardship outside the development impact areas. Existing SEAs predominantly depend on a custodial management approach, with the County providing oversight on an as-needed

basis. Conservation easements and management agreements now provide a broader spectrum of options to the land owner, and can free the County of undue responsibility after project completion. Such provisions for long-term natural resource custodianship and sustainability were not emphasized in the original SEA study.

2.2 EXPANDED OBJECTIVES

The preservation of biological diversity today, as in 1976, remains a paramount objective of conservation planning for a variety of reasons. Aesthetically, conserved open space adds value to adjacent developed land, and provides an essential environmental buffer between intensive human activity areas. Natural open space near urban areas can function as a visual amenity, a passive recreational asset, a groundwater recharge site, a reservoir for native species populations, and a buffer between development and surrounding larger land use reserves (such as Natural Forests).

More importantly, large natural open space areas can conserve entire habitats and ecosystems intact, preserving species diversity and insuring that native species do not become extinct or endangered. Open space or low-density zoning areas must be of sufficient size to retain all the essential "pieces" of the system, however to function biologically over time, and while absolute size parameters are not known for many systems, as a general rule, larger is better. The story of the "mouse and the fungus" provides a good example of how conserved systems need sufficient space and their component species to function. Until fairly recently, forestry practices traditionally focused upon the growing of trees, often arrayed in plantations which emphasized space utilization rather than natural habitat values, and therefore lacked many animal species. Despite the massive use of fertilizers, herbicides and pesticides, these plantations rarely yield the quality or quantity of wood found in a native forest of similar tree composition. Ecological studies of forest ecosystems were undertaken, and in time it was demonstrated that most trees cannot efficiently extract nourishment directly from the soil, but rather are sustained biologically by a type of external fungi which grow on their root systems and aid in the uptake of nutrients. The spores of these fungi are eaten, but not digested, by native mice, who then distribute them over the forest floor in their fecal pellets, insuring their availability to seedling and sapling trees. The mouse population is held in balance by owls and other small predators, many of which in turn roost, shelter and nest in the trees. This example and many others have demonstrated that long-term preservation of all ecosystem components-- however unassuming in stature-- is essential to the continued existence of our deserts, wetlands, forests and other natural habitat areas.

On a more pragmatic note, several recent medical discoveries have been made wherein chemicals extracted from tree bark and herbaceous plants provided cures for certain types of cancer; a previously unknown perennial corn species, with the potential to save billions of dollars in

replanting costs, was discovered on a hillside being cleared to plant corn, and a compound derived from the blood of horseshoe crabs has proven to be the most effective way to screen for contaminants in drugs, vaccines, artificial limbs and intravenous drips, and now is used in virtually every hospital in America. Other studies have shown that many insect species have the ability to ingest and modify chemical compounds from their toxic host plants, potentially leading to new or improved ways of treating the way humans react to these compounds. New plant and animal species continue to be found in natural habitats within a few miles of major urban centers, and it is clear that we have only begun to understand the genetic, biochemical and physical diversity—and potential—of our own urban "backyard."

While the SEA designation is not directly intended to provide such biological services, it is logical to create SEAs which encompass biotic resources cumulatively representing the biodiversity (and yet-to-be-discovered biological potential) of Los Angeles County. These areas must be designed to sustain themselves into the future, genetically and physically. Therefore, the present SEA study focuses on maintaining biodiversity in the long-term by creating boundaries which follow natural biological parameters, embrace habitats, linkages and corridors, and are of sufficient size to support sustainable populations of their component species. Thus, this study attempts to resolve the issue not adequately addressed in the 1976 study by applying updated conservation planning concepts and philosophies to design a series of larger, interconnected SEAs.

3. SELECTION CRITERIA

3.1 1976 CRITERIA

In 1976, England and Nelson developed a set of eight criteria to identify and designate SEAs. An explanation of each criteria is provided in Appendix A, 1976 Criteria for Selecting and Classifying SEAs.

- Class 1 The habitat of rare, endangered, and threatened plant and animal species.
- Class 2 Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution on a regional basis.
- Class 3 Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution in Los Angeles County.

- Class 4 Habitat that at some point in the life cycle of a species or group of species, serves as a concentrated breeding, feeding, resting, or migrating grounds, and is limited in availability.
- Class 5 Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or they represent an unusual variation in a population or community.
- Class 6 Areas important as game species habitat or as fisheries.
- Class 7 Areas that would provide for a preservation of relatively undisturbed examples of the natural biotic communities in Los Angeles County.

Class 8 – Special areas.

The numbering sequence of one through eight has sometimes been misinterpreted as a priority ranking. England and Nelson actually presented these criteria, or classes of resources, in order of increasing availability. In their 1976 report, England and Nelson clearly stated that the classification system should not be interpreted as a measure of the absolute value of the area, but as an index of how close a certain type of resource is to being lost from Los Angeles County.

3.2 UPDATED CRITERIA

Since the adoption of the 1976 SEA Study, as amended in 1980, the jurisdictional status of some SEAs has changed while others have remained relatively stable. From a jurisdictional standpoint, portions or all of many SEAs were actually designated within cities incorporated prior to 1976. In addition, portions or all of several other SEAs became part of city jurisdictions incorporated since 1976. While some of these cities do not formally recognize SEAs by this title in their General Plans and Zoning Ordinances, others afford some degree of sensitivity through open space designations and protective grading guidelines (See Appendix B, *City and County Survey Responses*).

Incorporation of new cities and annexations are expected to continue and are not processes that selection criteria can reasonably foresee and address. Of greater concern and relevance are examples of SEAs which have remained within City and County jurisdictions where biotic diversity has become threatened or locally extinct. According to a study sponsored by the California Native Plan Society (Landis, 1993) at least five of the SEAs designated for their rare plant habitats have suffered from the effects of weed abatement, freeway construction, illegal dumping, development or invasive plants; at least three SEAs designated for unique or restricted plant communities, vegetative

associations and/or habitats have been disturbed by invasive plants; and, ongoing flood control maintenance and development have degraded three others.

In the cases of these SEAs, it is apparent that the criteria correctly identified the types and range of resources comprising biotic diversity in the county; however, the delineation of SEAs in 1976 failed in some cases to identify all of the resources required to sustain this diversity. This has occurred in the previous examples with or without the incorporation of SEAs into cities. As mentioned, some cities recognize the importance of existing SEAs in their General Plans, Zoning Ordinances and special protective grading guidelines; some have also requested the county continue to designate them as SEAs as part of this study.

Having identified sustainability of diversity as a key challenge, this study also recognized that the status of resources has changed since 1980. In drafting revised selection criteria, this study critically reviewed criteria used by England and Nelson. It was determined that the criteria used in 1976 should be modified. Consequently, one criterion was modified and two were deleted altogether. Criterion Class 1 – The Habitat of Rare, Endangered, and Threatened Plant and Animal Species, was modified to address the habitat of "core populations" of such species but not all populations. This was determined to be necessary to recognize many species within Los Angeles County that have been granted protected status since 1976 and key sites where these species may occur throughout the County. It is also important to note that the designation of critical habitat areas and regulation of endangered species acts is under the purview of the U.S. Fish and Wildlife Service (USFWS) and the State Department of Fish and Game (CDFG). Regardless, the recognition of core populations that contribute significantly to the preservation of biotic diversity could be addressed in the County's General Plan policies. Criterion Class 6 – Areas Important As Game Species Habitat or as Fisheries, was omitted. This was due to the questionable contribution of these areas to biotic diversity, in the absence of other criteria, which adequately address resources at the species level. In addition, it was determined that the scope of this study does not include the maintenance of recreation, sport, or other commercial activities as they pertain to biological resources which are regulated by the CDFG. Finally, Criterion Class 8 – Special Areas, was deleted due to its vagueness and the ability of the remaining criteria to encompass its objectives.

As in 1976, a revised draft of selection criteria was distributed for public review. These criteria were sent to resource agencies, conservation groups, local jurisdictions and individual members of the public for review and comment. The review indicated support with minor modifications. A number of the respondents recommended that misrepresentation of resources as prioritized according to the numbered criteria scheme be corrected; and, to apply the criteria not simply to targeted resources, also to areas that afforded long-term sustainability. Hence, in some cases, SEA nominations included large areas often conforming to entire watersheds.

The final SEA selection criteria used in this study are presented in Table 1, *Los Angeles County SEA Update Study 2000 Selection Criteria*, on page 11. The difference between the modified criteria and those used by England and Nelson in 1976 has been described above. For the purpose of this study, updated criteria were used to determine if an existing SEA or candidate SEA should be re-designated or designated as a SEA in the Los Angeles County General Plan. In addition to satisfying a minimum of one criterion, any prospective SEA must lie at least partially within an unincorporated area of Los Angeles County.

Table 1 LOS ANGELES COUNTY SEA UPDATE STUDY 2000 SELECTION CRITERIA

Criterion

Intent/Rationale

Endangered or Threatened Plant or **Animal Species**

A) The Habitat of Core Populations of These areas are important in maintaining viable plant and/or animal populations for those species recognized by state and or federal resource agencies as being extremely low in numbers or having a very limited amount of suitable habitat available. The terms "endangered" and "threatened" have precise meanings defined in both state and federal law (see below). The identification of "core population" will be determined by the United States Fish & Wildlife Service (USFWS) and the California Department of Fish & Game (CDFG). This criterion is not meant to constitute a recovery program for listed species but rather one element of a more comprehensive conservation effort for the long term sustainment of listed species within the county. At the local level, recovery programs of both the CDFG and the USFWS have measures in place which can impose severe penalties for the "take" of listed species or their habitat.

> Federally Endangered: "any species which is in danger of extinction throughout all or a significant portion of its range ..."

Federally Threatened: "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

State Endangered: "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease."

State Threatened: "... a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter [California Code of Regulations, Title 14, Sec 670.5]. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species."

The term "core population" as used here is a general biological term referring to a known and or a viable population. Other locations of endangered or threatened plant or animal species may also occur in Los Angeles County which are not within a SEA. It should also be noted that the concept of core populations is consistent with current thinking of the USFWS and the CDFG.

Table 1 Los Angeles County SEA Update Study 2000 Selection Criteria (Continued)

Criterion

Intent/Rationale The purpose of this criterion is to identify biotic resources that are

uncommon on a regional basis. The geographical region considered

- B) On a Regional Basis, Biotic Communities, Vegetative Associations, and Habitat of Plant and Animal Species that are either unique, or are restricted in distribution
- could be as small as the southern California coastal plains, the Transverse mountain ranges, the Mojave Desert, the southern California coastline, etc.; or they could be as large as southern California, the Pacific coast, all of California, the western United States, or even larger. The point being that the community, association, or habitat is either unique or restricted in distribution in an area larger than the political boundaries of Los Angeles County (i.e., coastal sage scrub, native grasslands, or vernal pools). Resources that are limited in distribution in the region being considered, but common elsewhere, are also included under this category.
- C) Within Los Angeles County, Biotic Communities, Vegetative Associations, and Habitat of Plant and Animal Species that are either unique, or are restricted in distribution

The purpose of this criterion is to identify biotic resources that are uncommon within the political boundaries of Los Angeles County, regardless of their availability elsewhere. The County has a high diversity of biological components. It and San Diego County are the only counties in the United States that possess coastal, montane, and desert subregions within their boundaries. It is a rich heritage that few local governments have an opportunity to preserve.

Many biotic communities that were once common in Los Angeles County have been severely reduced due to urban and agricultural development. This is especially true south of the San Gabriel Mountains, and among the agricultural fields of the North County. Other biotic features have never been common.

- D) Habitat that at some point in the life cycle of a species or group of species, serves as Concentrated Breeding, Feeding, Resting, or Migrating Grounds, and is limited in availability either regionally or in Los Angeles County
- Species or groups of species, at various points in their life cycles, tend to congregate in certain areas. These areas possess resources that are essential to the maintenance of specific wildlife species. This criterion is intended to identify those areas that are limited in distribution either regionally or in Los Angeles County, and not the primary habitat of common species or groups of species.
- E) Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community

Oftentimes scientists learn the most about a biological phenomenon by studying it at an extreme in its distribution. This frequently reveals the biological and ecological parameters under which it can survive. In addition, isolated populations and communities often are relicts of what was present in an area at some previous time, and may show genetic traits not found elsewhere in the species. These biological and ecological parameters may be useful in determining taxonomic relationships.

Table 1 Los Angeles County SEA Update Study 2000 Selection Criteria (Continued)

Criterion

Intent/Rationale

F) Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities In Los Angeles County

The intent of this criterion was to identify examples of the primary biotic resources in Los Angeles County. At least one example (e.g., native grassland, valley oak savannah) of each vegetation type will be selected from the various geographical regions in the County in order to preserve basic bio-geographic diversity.

Note: Criterion Class 6 from the 1976 SEA study has been omitted in this study due to a lack of biological significance. The scope of the SEA study entails the evaluation of county biological resources which does not include the maintenance of recreation, sport, or otherwise commercial activities. In addition, many of these activities, as they pertain to biological resources, are managed by the CDFG. Criterion Class 8 from the 1976 SEA study has also been omitted due to its vagueness; remaining criteria cover its objective.

4. IDENTIFICATION AND DELINEATION OF PROPOSED SEAS

4.1 OUTREACH PROGRAM

An outreach program served as the first step in identifying prospective SEAs. The program obtained input from interested parties including the general public, governmental resource agencies, and academic institutions. In an effort to notify interested parties, the PCR Project Team and the Los Angeles County Department of Regional Planning (DRP) jointly assembled a mailing list of over 400 entries. In September 1999, each party on the list was mailed a notice that the study had been initiated (copy provided in Appendix C, *SEA Update Study Notice*). The material included: the purpose of the update study and a schedule of public meetings to solicit public comments.

Public meetings hosted by the DRP and assisted by the PCR project team were held in several areas of the County in late September and early August 1999. After a brief summary presentation, comments were received and recorded and a nomination form was distributed (Appendix D, *Public Meeting Materials*). The survey questionnaire/nomination form was also available time through the County website.

The outreach program also gathered input from resource agencies. Meetings were held in the Carlsbad and Ventura offices of the USFWS with regional representatives from the CDFG attending. The main objective of these meetings was to acquire all available information on federal and state listed species within the County. Of particular interest, were locations of core populations of listed species. This information would be used as supporting evidence for one of the revised criteria designations. Secondarily, species account information would be added to sensitive species occurrences within prospective SEAs where applicable. Meetings were also held with resource agencies or groups with a more local focus such as the National Park Service, Whittier Wildlife Corridor Conservation Authority, Catalina Island Conservancy, and the West Mojave Planning Group. Discussions with these groups provided background for review of areas for prospective SEA designation and the eventual boundary delineation.

The final phase of the outreach program consisted of a survey form mailed to all incorporated cities within Los Angeles County that contained entire SEAs or SEA segments within their jurisdictional boundaries (copy of survey questionnaire provided in Appendix E, *City and County Questionnaire Form*). The survey questions focused on determining the extent and condition of biological resources and open space within the city as well as the degree of protection afforded to existing SEAs.

4.2 DATABASE/LITERATURE REVIEW

The second step in the process of identifying prospective SEAs consisted of a thorough literature review. The PCR Project Team started this task by reviewing the year 2000 version of the California Natural Diversity Database covering Los Angeles County. This database provided accounts of sensitive species recorded in the County and was used to support the potential presence of habitats as well. In order to determine the current status of sensitive species, the most recent copies of all listing documents of the USFWS, the CDFG, and the California Native Plant Society were reviewed.

On a more local level, databases and literature that pertained to particular areas of the County were collected from groups focusing on biological resources within those areas. These groups, or agencies, included: National Park Service; Santa Monica Mountains Conservancy; Whittier Wildlife Corridor Conservation Authority; West Mojave Planning Group; Edwards Air Force Base (AFB); Catalina Island Conservancy; Mojave California Poppy Reserve; Frank G. Bonelli Park; and many others. Data including species accounts and vegetation maps gathered from these groups were used to aid in the review and eventual delineation of proposed SEAs in those areas. A complete listing of all sources used in this study is provided in Appendix F, *Comprehensive Study Sources*, of this report.

4.3 EXISTING SEA REVIEW

All existing SEAs in unincorporated Los Angeles County at the time of study were evaluated. The preliminary evaluation of these SEAs consisted of a review of the 1976 SEA Nomination archive files (England and Nelson, 1976). These files included original nomination reports with SEA descriptions, SEA boundaries on USGS topographic maps, and supporting data gathered during the 1976 study.

A second source of literature used to review existing SEAs was previous (SEATAC) biota reports and the Phase 1 SEA Study (Michael Brandman Associates, 1991). The SEATAC reports evaluated potential impacts of proposed projects within existing SEAs and normally included: a description of the SEA; a list of potential sensitive species in the vicinity; a description of the vegetation of the area; current use of the site and adjacent lands; and a list of all species observed. The *Phase 1 SEA Study*, evaluated the condition of seven existing SEAs (No. 6 - Las Virgenes; No. 9 - Cold Creek; No. 10 - Tuna Canyon; No. 15 - Tonner Canyon/Chino Hills; No. 19 - San Francisquito Canyon; No. 45 - Dudleya Desiflora Population, Azusa; No. 61 - Kentucky Springs).

Data obtained from these reports was used in conjunction with ground-truthing field studies (see below) to define the location, extent, and condition of biological resources within each existing SEA. Where applicable, this information was extrapolated to adjacent lands. These data were also used to review the existing SEA boundaries to determine their accuracy and/or potential for recommended modification.

4.4 AERIAL PHOTOGRAPHY

Aerial photos were obtained from two sources to accurately assess biological resources and define boundaries. The DRP provided high resolution, digital, color, ortho-rectified photos taken in the summer of 1999. These images covered most of the existing SEAs in the unincorporated County and some adjacent lands. Photographs of the remaining SEAs in unincorporated County, as well as candidate areas, were acquired from the United States Geological Survey (USGS). These images were high resolution, black and white, digital, ortho-rectified, photos taken five to ten years ago. Approximately 99 percent of the areas encompassed by existing and prospective SEAs were covered aerially. The remaining one percent, mostly within U.S. Forest, was evaluated using USGS Quadrangle maps at 1:24,000 (1" = 2000'). Photographs from both sources were printed and mounted for field use at a scale of 1:12,000 (1" = 1000').

4.5 FIELD STUDY

After reviewing data for existing and prospective SEA areas, field surveys were performed. The objective of the field surveys was to verify the location and evaluate the condition of biological resources previously described in the literature and nomination material. Using mounted aerial photographs as a reference, sites were toured by accessing vantage points which would allow for review of large areas from a single point. Although, not every resource was verified due to the limitations of access to private properties, most areas were field-truthed.

Based on the results of the literature review and field-truthing surveys, preliminary proposed boundaries were formulated and sketched on regional maps. PCR project team biologists next visited each proposed SEA area and refined the boundaries onto aerial photographs. Delineation of the outer boundaries of the proposed SEA's considered many factors. In general they were drawn to include those areas that met the designation criteria and the sustainable biological unit of which they are a part. Most development and other disturbed areas that occurred along the edges of these units were excluded from the SEA. Within the interior of proposed SEAs, only large developments were excluded. After field efforts were completed, boundaries were reviewed and refined a final time to eliminate drawing errors and to ensure the accuracy of the boundary position. The proposed boundaries were then digitized and incorporated in a Geographic Information System (GIS) formatted database.

The final field task involved mapping the vegetative communities within the boundaries of each proposed SEA. Vegetation boundaries were drawn on aerial photographs in the field, then later digitized into the GIS formatted database. Plant communities were classified using standard methodology and terminology. Most of the communities correspond directly with those listed in Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California (1986 and 1992 update). A few communities were classified using standard naming conventions based on dominant species. Where possible, classifications were specific; however, many areas were classified in more general or mixed terms (e.g., riparian, chaparral/coastal sage scrub) due to access limitations. Descriptions of each plant community can be found in the individual proposed SEA reports.

Vegetation maps for two of the proposed SEAs were acquired in digital format from existing sources. The National Park Service provided a map of the Santa Monica Mountains, and the Santa Catalina Island Conservancy provided a map of Santa Catalina Island. These maps were reprojected and printed on USGS topographic maps and reviewed for accuracy. Descriptions of vegetative communities within these SEAs were developed by PCR project team biologists in the field.

Several factors limited the accuracy of field efforts during this study. Access to many areas within unincorporated County is restricted. Some areas within proposed SEAs that were in private property or inaccessible due to terrain or surrounding private property. These areas could only be interpreted from aerial photographs. Secondly, USGS aerial photographs, used in many areas, are out of date and do not reflect land use changes within the last five to ten years. Boundary lines in these areas may not be as precise as others delineated on more recent photographs. Finally, while many areas were mapped using color photographs, the black and white USGS photographs made interpretation of the remaining areas difficult. Designation of community types was particularly difficult with these photographs due to the lack of clear distinctions in gray scale. Although these factors limited the accuracy of the study in some areas, efforts were made wherever possible to increase the precision of the final product.

5. PROPOSED SEAs

5.1 CANDIDATES

The list of candidate SEAs was derived from two primary sources. Initially, the County identified all existing SEAs as candidates with the directive that those SEAs entirely or partially within County unincorporated lands be studied. Those SEAs entirely within incorporated cities were to be retained without further study or modification. The County also identified several areas for consideration that were not existing SEAs but which had been brought to their attention as

candidates by SEATAC members, the County biologist and others. The remaining candidates were obtained through the survey questionnaire/nomination process included in the study's public outreach program. Through this process, numerous additional candidate areas were received for evaluation. A summary of the respondents and their nominations along with this study's response to these nominations is provided in Appendix G, SEA Nomination Table.

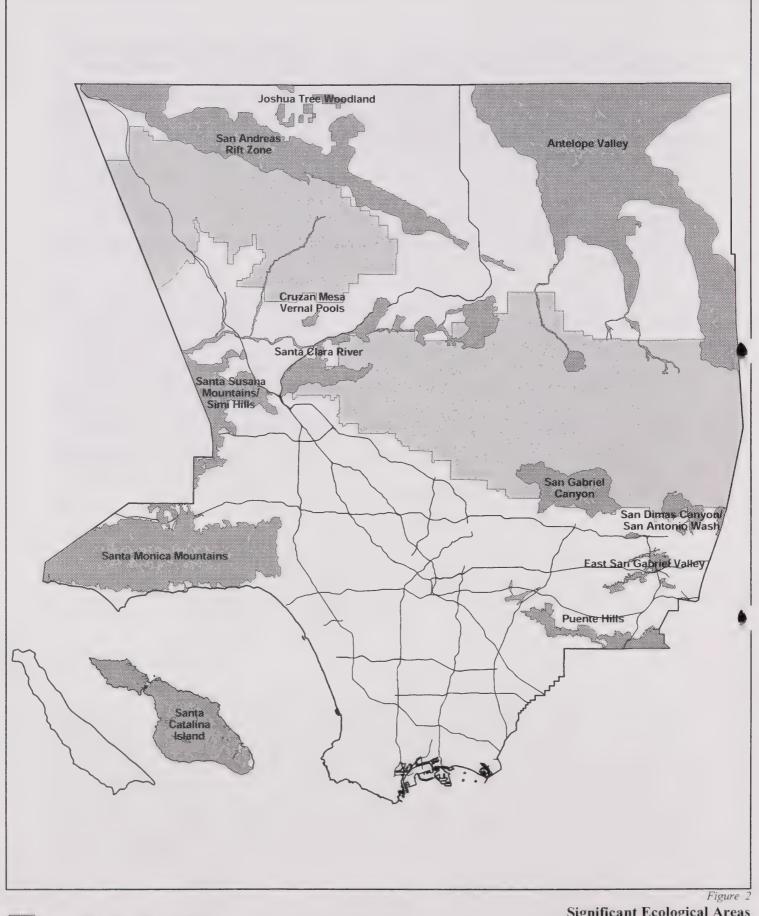
Nominations were received from the following groups, and individuals: California Native Plant Society, Altadena Foothill Conservancy Planning, Ballona Ecosystem Education Project and Save All of Ballona, Endangered Habitats League, Environment Now, Friends of the Santa Clara River, Los Cerritos Wetlands Task Force, Monrovia Mountain Conservancy, National Audubon Society, Natural History Club of Acton/Agua Dulce, Puente Hills Landfill Native Habitat Conservation Authority, Resource Conservation District of the Santa Monica Mountains, San Gabriel Mountains Regional Conservancy, Santa Monica Mountains Task Force/Sierra Club Chapter, Santa Susana Mountain Park Association, Santa Clarita Organization for Planning the Environment, Sierra Club - Santa Clarity Valley and Santa Clarita Valley Preservation Committee, Sierra Club -Angeles Chapter Conservation Committee, Wildlife Corridor Conservation Authority, The Theodore Payne Foundation for Wildflowers and Native Plants, Inc., and Desert Tortoise Preservation Committee, State of California, Resource Agency - Santa Monica Mountains Conservancy, U.S. Department of Agriculture - National Forest Service - Angeles National Forest, Wilmington Harbor City Harbor Lake Regional Park, U.S. Department of the Interior - National Park Service - Santa Monica Mountains National Recreation Area, U.S. Department of the Interior - Bureau of Land Management - West Mojave Interagency Planning Team, and California Department of Parks and Recreation - Angeles Division, Diamond Bar East Partners, Hacienda Heights Improvement Association, David Brown, Judy Garris, Marcia Scully, and Barbara Wampole. Areas nominated by the respondents varied considerably from modifications to individual existing SEA boundaries to the entire watersheds of major rivers including all tributaries.

5.2 CONCLUSIONS

Twelve SEAs are proposed, based upon this study. These are shown in Figure 2, *Proposed Boundaries*, on page 20. The Proposed SEAs have been designated Antelope Valley, San Andreas Rift Zone, Santa Clara River, Joshua Tree Woodland, Cruzan Mesa Vernal Pools, Santa Susana Mountains/Simi Hills, Santa Monica Mountains, San Gabriel Canyon, San Dimas Canyon/San Antonio Wash, East San Gabriel Valley, Puente Hills, and Santa Catalina Island. In comparison to the approximately 176,174 acres (unincorporated) within the 61 existing SEAs, the twelve proposed SEAs cover approximately 442,983 acres (unincorporated) whereby many existing SEAs are consolidated and linked.

Individual Biological Assessment Reports for each of the proposed SEAs have been prepared under separate covers. These reports include location, description, existing land use, land ownership, vegetation, wildlife, wildlife movement, sensitive resources, regional value, and recommended management practices for each proposed SEA. A list of all plant and animal species potentially occurring within each proposed SEA was also prepared and is included in Appendix H, *Comprehensive Floral and Faunal Compendium*. A summary of the disposition of proposed and existing SEAs is provided in Table 2, *Proposed Versus Existing SEAs*, on page 21. In general, however, proposed changes are the result of incorporating sensitive resource information with current conservation practices.

Recent studies of biological diversity have demonstrated that there are two essential components needed within land use plans to conserve native species and their habitats in an urbanizing environment: sufficient size (of the conservation or open space use area), and connectivity (with other like or supporting systems). Urban "islands" lose biological diversity at a fairly steady rate, commensurate with size (smaller habitat patches losing more, faster), and isolated habitat areas, regardless of size, have less opportunity to regain species by re-colonization from other areas. The distance between habitat areas, and land use within the intervening areas, also influence both the rate of loss and the potential for gain. The criteria used to designate SEAs changed only slightly, but their application was made at a greater scale reflective in part of the changes that have occurred within and around the existing SEAs in the past 25 years.



Significant Ecological Areas Update Study 2000 Proposed Boundaries

Table 2
PROPOSED VERSUS EXISTING SEA BOUNDARIES

Proposed				Existing	Comparison		
SEA Name	Total Acres	Uninc. Acres	SEA#	SEA Name	Total Acres	Uninc. Acres	
Santa Monica Mountains	99,430	70,880	3	Zuma Canyon	3,202	≈2,900	Consolidated with proposed Santa Monica Mountains SEA.
			4	Upper La Sierra Canyon	287	287	Consolidated with proposed Santa Monica Mountains SEA.
			5	Malibu Canyon and Lagoon	3,680	≈3,500	Consolidated with proposed Santa Monica Mountains SEA.
			6	Las Virgenes	500	≈250	Consolidated with proposed Santa Monica Mountains SEA.
			7	Hepatic Gulch	15	15	Consolidated with proposed Santa Monica Mountains SEA.
			8	Malibu Creek State Park Buffer Area	245	245	Consolidated with proposed Santa Monica Mountains SEA.
			9	Cold Creek	1,552	1,552	Consolidated with proposed Santa Monica Mountains SEA.
			10	Tuna Canyon	1,491	≈1,350	Consolidated with proposed Santa Monica Mountains SEA.
			11	Temescal-Rustic- Sullivan Canyon	5,702	0	Consolidated with proposed Santa Monica Mountains SEA.
			12	Palo Comado Canyon	2,496	≈1,000	Consolidated with proposed Santa Monica Mountains SEA.
			39	Encino Reservoir	2,071	0	Consolidated with proposed Santa Monica Mountains SEA.
Subtotal	99,430	70,880			21,241	11,099	
Puente Hills	13,421	10,103	15	Tonner Canyon/ Chino Hills	4,145	≈3,950	Consolidated with proposed Puente Hills SEA.
			17	Powder Canyon/Puente Hills	609	≈ 100	Consolidated with proposed Puente Hills SEA.
			42	Whittier Narrows Dam County Recreation Area	1,585	≈1,300	Consolidated with proposed Puente Hills SEA; except for northerly portions.
			44	Sycamore and Turnball Canyons	607	≈ 100	Consolidated with proposed Puente Hills SEA.
	13,421	10,103			6,946	5,450	

Table 2
PROPOSED VERSUS EXISTING SEA BOUNDARIES
(CONTINUED)

Proposed			Existing				Comparison
SEA Name	Total Acres	Uninc. Acres	SEA#	SEA Name	Total Acres	Uninc. Acres	
East San Gabriel Valley	5,175	722	16	Buzzard Peak/ San Jose Hills	601	≈300	Consolidated with proposed East San Gabriel Valley SEA.
			18	Wayhill	27	0	Studied; not included in proposed SEA due to degraded nature of resources and disjunct location.
Subtotal	5,175	722			628	300	
Santa Clara River	37,774	19,408	19	San Francisquito Canyon	747	≈650	Consolidated with proposed Santa Clara River SEA.
			23	Santa Clara River	4,829	≈3,600	Consolidated with proposed Santa Clara River SEA.
			61	Kentucky Springs	1,490	1,490	Consolidated with proposed Santa Clara River SEA.
Subtotal	37,774	19,408			7,066	5,740	
Santa Susana Mountains/ Simi Hills	26,795	23,425	20	Santa Susana Mountains	18,240	≈17,900	Consolidated with proposed Santa Susana Mountains/Simi Hills SEA.
			21	Santa Susana Pass	1,225	≈750	Consolidated with proposed Santa Susana Mountains/Simi Hills SEA.
			13	Chatsworth Reservoir	1,301	0	Consolidated with proposed Santa Susana Mountains/Simi Hills SEA.
			14	Simi Hills	850	≈800	Consolidated with proposed Santa Susana Mountains/Simi Hills SEA.
			63	Lyon Canyon	171	171	Consolidated with proposed Santa Susana Mountains/Simi Hills SEA.
			64	Valley Oaks Savannah	320	320	Consolidated with proposed Santa Susana Mountains/Simi Hills SEA.
Subtotal	26,795	23,425			22,107	19,941	
San Gabriel Canyon	22,966	128	22	Santa Fe Dam Floodplain	2,125	0	Consolidated with proposed San Gabriel Canyon SEA.

Table 2
PROPOSED VERSUS EXISTING SEA BOUNDARIES
(CONTINUED)

Pro	posed			Existing			Comparison
SEA Name	Total Acres	Uninc. Acres	SEA#	SEA Name	Total Acres	Uninc. Acres	
			45	Dudleya Densiflora population	151	≈60	Consolidated with proposed San Gabriel Canyon SEA.
			62	Galium Grande Population	84	0	Consolidated with proposed San Gabriel Canyon SEA.
Subtotal	22,966	128			2,360	60	
San Dimas Canyon/San Antonio Wash	6,785	1,568	25	San Dimas Canyon	104	≈15	Consolidated with proposed San Dimas Canyon/San Antonio Wash SEA.
			26	San Antonio Canyon Mouth	766	0	Consolidated with proposed San Dimas Canyon/San Antonio Wash SEA.
Subtotal	6,785	1,568			870	15	
Antelope Valley	222,325	197,634	47	Edwards Air Force Base	17,396	17,396	Consolidated with proposed Antelope Valley SEA.
			48	Big Rock Wash	6,202	6,202	Consolidated with proposed Antelope Valley SEA.
			49	Little Rock Wash	3,225	≈1,300	Consolidated with proposed Antelope Valley SEA.
			50	Rosamond Lake	13,584	13,584	Consolidated with proposed Antelope Valley SEA.
			51	Saddleback Butte State Park	5,362	5,362	Consolidated with proposed Antelope Valley SEA.
			52	Alpine Butte	5,635	≈4,500	Consolidated with proposed Antelope Valley SEA.
			53	Lovejoy Butte	1,955	1,955	Consolidated with proposed Antelope Valley SEA.
			54	Piute Butte	1,295	1,295	Consolidated with proposed Antelope Valley SEA.
			55	Desert Montane Transect	26,775	26,775	Consolidated with proposed Antelope Valley SEA.
Subtotal	222,325	197,634			81,429	78,369	

Table 2
PROPOSED VERSUS EXISTING SEA BOUNDARIES
(CONTINUED)

Proposed			<u>Existing</u>			Comparison	
SEA Name	Total Acres	Uninc. Acres	SEA#	SEA Name	Total Acres	Uninc. Acres	
San Andreas Rift Zone	89,698	68,722	56	Ritter Ridge	2,290	≈900	Consolidated with proposed San Andreas Rift Zone SEA
			57	Fairmont and Antelope Buttes	5,567	5,567	Consolidated with proposed San Andreas Rift Zone SEA.
			58	Portal Ridge/ Liebre Mountains	31,063	31,063	Consolidated with proposed San Andreas Rift Zone SEA.
			59	Tehachapi Foothills	4,611	4,611	Consolidated with proposed San Andreas Rift Zone SEA.
Subtotal	89,698	68,722			43,531	42,141	
Joshua Tree Woodland	4,728	4,728	60	Joshua Tree Woodland Habitat	5,760	5,760	Consolidated with proposed Joshua Tree Woodland SEA (existing boundaries do not correspond with proposed SEA due to past mapping error).
Subtotal	4,728	4,728			5,760	5,760	
Santa Catalina Island	46,537	44,707	N/A	Santa Catalina Island	≈7,200	≈ 7,050	Consolidated with proposed Santa Catalina Island SEA.
Subtotal	46,537	44,707			7,200	7,050	
Cruzan Mesa Vernal Pools	958	958	N/A	N/A	0	0	No existing SEAs within proposed SEA.
Subtotal	958	958			0	0	
N/A			1	Malibu Coastline	11,754	0	Not studied; marine areas not included in study.
			2	Point Dume	275	0	Not studied; entirely within City of Malibu.
			24	Tujunga Valley/Hansen Dam	2,660	0	Not studied; entirely within City of Los Angeles.
			27	Portugese Bend Landside	893	0	Not studied; entirely within City of Rancho Palos Verdes.
			28	El Segundo Dunes	166	0	Not studied; entirely within City of Los Angeles.
			29	Ballona Creek	459	≈ 140	Not studied; currently being studied by County/City of Los Angeles Local Coastal Program.

Table 2
PROPOSED VERSUS EXISTING SEA BOUNDARIES
(CONTINUED)

Pro	posed			Existing			Comparison
SEA Name	Total Acres	Uninc. Acres	SEA#	SEA Name	Total Acres	Uninc. Acres	
			30	Alamitos Bay	43	0	Not studied; entirely within Cit of Long Beach.
			31	Rolling Hills Canyon	520	0	Not studied; entirely within cities of Rolling Hills, Rancho Palos Verdes, and Rolling Hills Estates.
			32	Agua Amarga Canyon	289	0	Not studied; entirely within Cit of Palos Verde Estate, Rancho Palos Verdes, Rolling Hills Estate.
			33	Terminal Island	87	0	Not studied; entirely within Cirof Los Angeles.
			34	Palos Verde Peninsula Coastline	8,644	0	Not studied; marine areas not included in study.
			35	Harbor Lake Regional Park	386	0	Not studied; entirely within Ci of Los Angeles.
			36	Madrona Marsh Total	149	0	Not studied; entirely within Ci of Torrance.
			37	Griffith Park Total	3,441	0	Not studied; entirely within Ci of Los Angeles.
			40	Verdugo Mountains	11,554	0	Not studied; entirely within Ci of Glendale, Burbank, and Los Angeles.
			43	Rio Hondo Wildlife Sanctuary	109	109	Studied; not included in proposed SEA.
Subtotal	N/A	N/A			41,429	249	

Note: Differences between Total Acres and Unincorporated (Uninc.) County acres represents portions of SEAs within incorporated cities and National Forest.

Based on updated evaluation principles, the revised SEAs reflect a more modern and scientifically-grounded concept regarding size and connectivity. Rather than focus on a single resource or habitat type, existing SEAs are connected into a linkage system which should greatly improve the maintenance of critical resources. The SEA designation does not protect biotic resources on land per se, and SEAs are not preserves or conservation areas; rather, SEAs are areas in which planning should be sensitive to resources and maintenance of biological functions as well. By creating larger SEAs, habitat linkage zones are provided between related habitat types (such as the Antelope Valley buttes, or the San Andreas Rift Zone wetlands), and areas of sufficient width, to function as wildlife movement routes between open space areas. The linkages may serve to sustain populational genetic diversity of low-mobility species (such as plants, amphibians, reptiles, rodents), as well as provide refuge areas for migrant species. Corridor routes provide for dispersal between habitat areas by supporting more mobile species. The need for buffer areas has also been eliminated, with SEAs incorporating not only local resources (such as sensitive species) and their habitats, but also the seasonal support habitats for those species, with connections to essential sustaining resource areas (such as corridor areas and hydrological systems). Additionally, potential impacts of non-native species, feral pets, lights, noise, etc., on sensitive habitats have been alleviated by reducing the "edge effect" of urbanization relative to the overall size of the SEAs. In short, by "bridging the current SEA islands" wherever possible, zones of lower intensity human impacts between essential habitat resources have been provided, which help maintain overall species and habitat diversity in Los Angeles County.

6. RECOMMENDATIONS FOR IMPLEMENTATION

6.1 COMPLIANCE WITH FEDERAL AND STATE LAW

Existing federal and state laws mandate the regulatory jurisdiction of government agencies over certain biological resources within SEAs. These include regulation of the following resources: waters and wetlands of the United States (e.g., riparian habitats and most drainages) by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act; federally-listed threatened and endangered species by the USFWS under the federal Endangered Species Act; streambeds, riparian habitats and fisheries by the CDFG under Section 1603 of the California Fish and Game Code; statelisted threatened and endangered species by the CDFG under the California Endangered Species Act; and, water quality by the Regional Water Quality Control Board under Section 401 of the Clean Water Act. The SEA program does not attempt to duplicate these same regulatory programs; rather the implementation of the SEAs is viewed as a complementary program intended to preserve and sustain all biological diversity.

6.2 INTERPRETATION OF MAPPING

The rationale for mapping SEAs was to include, as accurately as possible at 1"=1000' scale, areas of sufficient acreage to ensure that the targeted resources would be sustained into perpetuity. This provides sufficient area for metapopulation stability (e.g., pollinators, water and nutrient supply, genetic exchange, etc.), or to at least provide a broad resource base for the biological elements present, in the event of a natural catastrophe (e.g., fire, flood, etc.) or isolating of the SEA. The margin of error of both the SEA boundaries and the vegetation boundaries at the scale of 1" = 1,000' is subject to several factors: 1) intended location versus actual location of drawn lines; 2) digitizing center versus off center of drawn lines; 3) width of drawn line; and, 4) reprojected coverages. However, the mapping was intended to be interpreted on a project submittal and analysis basis. Therefore, when interpreting SEA boundary maps, the following guidelines are recommended:

- SEA boundaries mapped along natural topographic "breaks", such as a ridge line or toe of slope, were intended to be delineated without variation.
- Boundaries mapped along man-made features, such as a roadway or an aqueduct, were drawn without variation, and are not intended to stray onto such features or cross them unless there is a clear change in boundary direction.
- Boundaries that conform to the edge of urban development were intended to follow the property lines of developed properties, such as the rear or side yard boundary.
- Pre-existing developed portions of properties within SEAs, such as buildings, landscaped areas, and ancillary structures (e.g., barns, corrals), oil field facilities, roadways, utility infrastructure (e.g., water tanks, flood control, electric towers), etc. were not intended as a part of the SEA. Some such features and their maintenance and operation are not subject to SEATAC review. Regardless, due to considerations of mapping scale these features may have been included within SEA boundaries but are recognized as not being biologically sensitive.

6.3 SEATAC REVIEW

As an outgrowth of the 1976 England and Nelson SEA Study, Los Angeles County formed the Significant Ecological Area Technical Advisory Committee. This committee consists of seven members from the private and public sectors with a range of biological expertise. The members are appointed by the DRP Director of Planning to serve staggered three year terms. The primary role of SEATAC is to review projects proposed within SEAs, coordinated by the Department's staff biologist. The Significant Ecological Area Technical Advisory Committee procedures and reporting guidelines provide an additional layer of County review and added scientific rigor to the California

Environmental Quality Act compliance process. The findings of this study support the need to continue and to even increase its activities by virtue of the larger and more complex SEAs proposed. As part of the on-going SEATAC role, the following policies are recommended:

- Clearly stress to users the benefits of completing a Biological Constraints Analysis for SEATAC review prior to developing development plans for a project site (i.e., time and processing savings).
- Eliminate the requirement for small mammal trapping due to the risk associated with hantavirus and other pathogens carried by small mammals; rather, rely on species' range information and habitat evaluations.
- Implement a monitoring program relative to SEA issues and concerns for post-approval construction monitoring, restoration measures and monitoring, and reporting requirements to the DRP staff biologist.
- Require project impact analysis and mitigation measures to fully assess the effects of the project on SEA integrity using the existing SEA Design and Compatibility Guidelines; that is, give it equal consideration and emphasis, under its own heading, as the project site itself.
- Screen project applications within SEAs and exempt projects with nominal effects from further SEATAC review, subject to specific conditions, as appropriate and as developed on a case by case basis. Projects that have undergone SEATAC/environmental review (but may have not been approved) should also be considered in this manner. This would enable SEATAC to focus its time and efforts on projects with potentially substantial effects.

6.4 COMPREHENSIVE LAND USE MANAGEMENT PRACTICES

Land use management guidelines are listed below for all projects within SEAs. These guidelines are proposed to be used in concert with the specific recommended management practices provided in each of the individual SEA reports.

General

It is difficult, if not impossible, to anticipate all potential land uses within SEAs. Therefore, the following recommended guidelines identify by example, rather than an exhaustive listing, general considerations for land uses within SEAs.

- High intensity and/or extensive land uses, by their nature, are not generally compatible
 with SEA resources. Such uses would include expansive housing tracts, regional
 commercial and business centers, landfills, quarries, surface mining, etc. Only in cases
 where key resources (e.g., core habitats, linkages, sensitive resources) are avoided and
 the dedication of open space is such that overall SEA integrity is preserved should such
 uses be considered.
- As a general rule, lands within SEAs should be used for low rural density development.
- As a target, development of properties within SEAs should disturb no more than 20 percent of the SEA. Considerations should be given to clustering development and dedicating open space that is contiguous with adjacent open space areas. To the extent feasible, place roads, utilities and other infrastructure within development areas and minimize encroaching into adjacent open space areas.
- Avoiding the intrusion and "spillover" of development effects on adjacent habitat areas should be a primary guiding principle in the design of all projects.
- New landscape plantings in developments, particularly at their perimeters, should avoid the use of invasive plant species and revegetate with native plant species indigenous to the surrounding area.
- All outdoor lighting in SEAs should be shielded and directed away from adjacent open space areas; further, lighting for public health and safety should represent the minimum required to conform to applicable ordinances.

Core Habitats

Many wildlife species, particularly carnivores and other wide ranging species require large areas of suitable habitat for genetically and demographically viable populations. In addition, large contiguous blocks of habitat are more likely to encompass diverse habitat types and are more easily buffered from potential impacts from surrounding developed lands. Most proposed SEAs contain large blocks of habitat generally conforming to a significant topographical feature such as a watershed, major river, butte, etc. These habitat blocks are referred to as "core habitats." Protecting natural open space (i.e., undeveloped land) within and adjacent to or near these large patches will maintain valuable protected core habitats, which, in turn, can protect larger wildlife populations and potentially generate a greater diversity of species and communities.

• Place primary emphasis on the preservation of large unbroken blocks of natural open space and wildlife habitat (i.e., core habitats).

• Preserve substantial areas of common habitats (e.g., chaparral, non-native grassland) along with sensitive and/or limited habitats (e.g., oak and riparian woodland, coastal sage scrub) within core habitat areas. Retention of common habitats should be designed so as to: buffer sensitive habitats from development; preserve ecotones; and, contribute to long-term functioning of plant and animal communities.

Habitat Linkages and Wildlife Corridors

Within the overall range of a species or suite of species, areas which possess sufficient cover, food, forage, water and other essential elements to serve as a movement pathway, or between two or more larger areas of habitat are referred to as "habitat linkages." An example would be a belt of coastal sage scrub traversing a golf course, and connecting sage scrub habitat areas on either side, providing a "safe passage" zone for smaller, slower-moving species such as lizards and rodents to maintain population connectivity between the two sides of the golf course.

Areas of open space of sufficient width to permit larger, more mobile species (such as foxes, bobcats and coyote) to pass between larger areas of open space, or to disperse from one major open space region to another are referred to as "wildlife corridors." Such areas generally are several hundred feet wide, unobstructed, and usually possess cover, food and water. The upland margins of a creek channel, open ridgelines, or open valleys in the bottoms of drainages often serve as major corridors locally, as do riparian alignments.

• When determining the portions of a development site to be retained in open space, give priority to the preservation of habitat linkages and movement corridors to maintain habitat connectivity.

Habitat connecting core areas together can mitigate the detrimental effects of shrinking habitat availability and wildlife population isolation. Typically, habitat in the SEAs consists of large contiguous blocks (core habitat areas) with intervening areas of open space containing non-native grassland, roads, rural residential, and other low intensity disturbance. A primary goal of any land use within SEAs should be to maintain high levels of connectivity between core habitat areas via a network of linkages and corridors each of which should be no less than 1,000 feet wide. Such linkages should make use of natural topographic features (ridge lines and drainages), vegetative cover (woodlands and scrub), water sources (streams, springs, and ponds), and road undercrossings (bridges and culverts). They may also take advantage of conservation easements, parklands, and preserves.

Also, when reviewing proposed land uses, linkages between core habitats should be analyzed, then be designated, as open space. The following guidelines should be considered.

- Keep road grading and clearance to a minimum; design any necessary roads that cross
 or enter linkage areas should be designed to minimize alterations to natural terrain and
 vegetation.
- To the greatest extent feasible and without compromising public safety, design roads within linkages to rural road standards with minimum widths and reduced speed limits.
- Place signs identifying "wildlife crossing area" along roads within linkage areas.
- Where a road crosses a streambed within a linkage area, utilize a bridge-crossing rather than a culvert; enhance vegetation at undercrossing portals to encourage wildlife use.
- Fencing should be discouraged and where needed should not be of a wildlife obstructing nature (e.g., barbed wire, chain link, solid wall), except around the immediate vicinity of residences and associated yards or where public health and safety dictates its use; all other fencing should be "open" in design and structure (e.g., split rail), and not exceeding four feet in height.
- Incorporate vegetative screening and intervening topography into project design and landscaping as buffers for linkages and corridors.

Fire Management

Many standard fuel management practices, some mandated by local and regional fire control agencies, are essentially incompatible with the desired conservation of natural biological resources within SEAs. Practices such as brushing increase erosion, destroy topsoil and native vegetation, and result in the proliferation of invasive, non-native plants. Repeated brushing may completely remove native habitat values, and altered substrates may not recover except over long periods of time without disturbance, and/or costly restoration programs to return a site to a native condition.

• The DRP should confer with the County Fire Department and Forestry and Fire Warden and sensitize them to this issue.

Fire risk reduction measures have the potential to significantly effect and fragment the habitat values of SEAs. Lot sizes of five acres of less can require over four acres of brush clearance, and within a rural residential subdivision, even with a conservation ethic, this can significantly impair natural habitat values and interrupt movement pathways and linkages. Alternative fire management schemes should be seriously explored with the appropriate fire prevention agencies, with consideration given to the following:

- Keep fuel reduction around residential structures to the minimum footprint necessary to insure public and private sector safety, and to comply with insurance requirements.
- For projects within SEAs, the DRP, through the SEATAC process, require fuel management programs which utilize agency-approved vegetation phasing (layering various types of lower-hazard native shrubs and ground-cover species) around the perimeter, and require that larger woody vegetation be thinned and trimmed rather than removed.
- Plan roadwork, fuelbreak creation and maintenance, and other similar activities performed by fire management agencies within SEAs, to reduce impacts to natural resources to the extent possible.

Public Access and Recreation

In general, public access, passive recreational uses and development of future recreation facilities are compatible with SEA management. Significant portions of any public lands proposed for inclusion in SEAs may have been originally acquired by governmental agencies specifically for recreational purposes. Some of these lands already have been developed as a National Recreation Area and County Regional Parks. It should also be stressed that there may be localized areas within SEAs where the biological resources are so sensitive that <u>no</u> access would be appropriate. These areas should be identified at the project level during the SEATAC review process. In addition, the following guidelines are recommended for the design of golf courses:

- Avoid areas supporting sensitive species and/or sensitive habitats (e.g., riparian areas, vernal pools, etc.).
- Incorporate conservation programs such as water and nutrient recycling and avoid changes in hydrology (groundwater and surface).
- Use indigenous native landscaping exclusively and divert runoff containing herbicides, pesticides, and other chemicals from reaching natural water courses and water bodies prior to clarification.

There are many examples of golf courses across the country that have been designed to achieve an "environmental friendly" character. In some cases, golf courses serve as manufactured linkages between habitat reserves. On a case-by-case basis, a new golf course proposed within a SEA should follow avoidance, preservation, and compensation measures, in that order, so the net result is minimal loss in biological resource value and function.

Infrastructure

Certain public infrastructure necessary for public health, safety or welfare may be unavoidable within SEAs. These include: arterial and other identified roads; water lines and associated facilities (e.g., pump stations, pressure control facilities, and access roads), regional water storage and treatment facilities; sewer lines and pump stations; electric, telephone, and natural gas facilities; and storm drain and flood control facilities. The following guidelines are recommended for use in the siting and construction of infrastructure, both existing and proposed, within SEAs.

- To the greatest extent feasible, siting of new infrastructure within SEAs should minimize impacts to natural habitats, and avoid sensitive species.
- Consider flexibility in future design and siting of facilities since many such facilities may not be constructed in the immediate future (e.g., certain arterial roads and water facilities to support growth), and the service environment for public utilities will change over time.

Routine operation and maintenance activities for existing and proposed facilities are to be expected within facility easements. These activities may include: road maintenance; regular patrol and inspection; insulator washing; facility operations; clearing and weed abatement around facilities; routine maintenance and repair of facilities; replacement, rehabilitation and upgrading of facilities; and, other activities mandated by regulation or law affecting public health, safety, and welfare.

For other activities, of a non-routine nature, the following guidelines are recommended:

- Facility operation, maintenance, and repairs that extend outside areas already cleared, should first document existing biological resources in the area to be disturbed using existing or new surveys, to be submitted for review to the DRP staff biologist. A revegetation plan should be prepared, implemented and monitored, by the agency proposing the action. The monitoring results should be submitted for review to the DRP staff biologist.
- Where feasible and consistent with public safety, encourage joint use for public access on infrastructure access roads in order to reduce the need for new trail construction.
- Undertake activities before or after the breeding/nesting season (typically March 15 to June 15).

The following guidelines are recommended to apply to the construction of new facilities.

- To the greatest extent feasible, locate and design infrastructure to minimize or avoid impacts to sensitive resources within SEAs, considering physical and engineering requirements of the proposed infrastructure.
- Design access roads for facilities that minimize disturbance and avoid impacts to sensitive resources. This will generally be the shortest feasible route. The cleared roadbed should be the minimum feasible width taking into account specific slope and safety requirements. Necessary erosion control measures and/or drainage pipes are also recommended.
- Require that a qualified biologist document the resources and vegetation in the area to be disturbed by the proposed facility; use the biological findings to provide the basis for revegetation and monitoring plans.

Wetlands, Riparian Habitats and Streambeds

Many land uses may have adverse effects on the quality, structure, and function of natural streambeds and their associated wetlands and riparian habitats. These uses include urban development, roads, mining, grazing, agriculture, recreational activities, reservoirs and flood control, among others. Because these resources are so critical to healthy ecosystems especially in semi-arid environments such as Los Angeles County, their conservation is considered vital to the long-term maintenance of SEAs.

The inherent functions and values of these habitats within local and regional ecosystems should be retained, such as: their importance to upstream, downstream and surrounding habitat systems; their critical value to migratory birds; their important contribution to habitat linkage and wildlife corridor networks; and their role in maintaining subsurface and surface water quality. For project planning and design purposes for all projects within SEAs resource conservation areas and buffer areas should be established adjacent to wetland, riparian and streambed habitat formations including: riparian and oak riparian woodlands, forests and scrub; desert riparian and wash; vernal pools; marshes, seeps and springs; and natural ponds. The purpose of using this approach is to define preservation areas where uses are excluded within wetland, riparian and streambed habitats (conservation area), plus an adjacent area with limited uses (buffer area). The buffer area serves to reduce impacts to the primary conservation or streamside area to accommodate water quality, fisheries, and terrestrial habitat management requirements. Consideration for resource conservation areas and buffer area setbacks should extend to habitat areas associated with all perennial, intermittent and ephemeral waters. Recommended guidelines to apply this concept are outlined below:

- Establish wetland, riparian and streambed resource conservation areas consisting of the target wetland, riparian and streambed habitat with minimum widths delineated as follows:
 - Riparian and oak riparian scrub, woodlands and forests at the edge of the riparian vegetation (i.e., the dripline) on either side of the active stream channel; if riparian vegetation is absent or sparse, use the bed and bank of the stream channel.
 - Desert riparian and wash because the associated riparian vegetation is typically sparse or xeric in life form, use the bed and bank of the active channel inclusive of any braided channel conditions.
 - Vernal pools use the maximum pool extent.
 - Marshes, seeps and springs use the edge of the saturated soil.
- Avoid impacts to resource conservation areas associated with channelization, bridge construction, mining and gravel extraction, utility crossings, etc.
- Designate resource conservation areas to be use exclusion areas and prohibit ground disturbing activities and vegetation removal.
- Establish buffer areas adjacent to and around resource conservation areas with minimum buffer setbacks measured from the edge of the resource conservation area as follows:
 - Riparian and oak riparian scrub, woodlands and forests and desert riparian and washes 300 feet for rivers and streams with resource conservation area width greater than 100 feet; 150 feet for rivers and streams with resource conservation area width 50 to 100 feet; 75 feet for rivers and streams with resource conservation area width less than 50 feet.
 - Vernal pools 150 feet, or the watershed boundary, whichever is greater.
 - Marshes, seeps and springs 300 feet for resource conservation area greater than 1 acre; 150 feet for resource conservation area 0.5 to 1 acre; 75 feet for resource conservation area less than 0.5 acre.
- Measure buffer setbacks horizontally, in plan view, since they are intended to serve as spatial buffers; consider lesser setbacks if topography and/or other physical features are determined to provide adequate screening and buffering.
- Designate buffer areas as limited use areas; compatible uses may include agriculture and grazing, passive recreation (hiking, riding, golf and parks with no night lighting), and brush thinning for fire hazard reduction (no removal of trees).

The above guidelines are intended as a general rule for the treatment of wetlands, riparian habitats and streambeds. At times, land uses may necessitate encroachment into the recommended resource conservation areas and buffer areas due to topography or other constraints and road and utility crossings. In these cases the following guidelines are recommended.

- If necessary, encroachment of land uses other than those considered as compatible above should be minimized.
- Crossings of riparian habitats and streambeds should be designed to be as perpendicular as possible to drainage courses in order to minimize resource disturbance.
- Whenever feasible, drainage courses should be bridged with minimal intrusions of abutments and bridge supports into the drainage in order to minimize disturbances and effects on natural surface flow.

Non-riparian/Upland Woodlands

Similar to riparian habitats and streambeds, it is recommended that upland woodlands consisting of oak species, California walnut, joshua tree, native conifers, and cherry (Island and Mainland) be considered sensitive and require avoidance and setback guidelines. Typically, native trees are susceptible to changes in hydrology, soil compaction, impermeable surfaces within their driplines, loss of root systems due to trenching, and other modifications to their integrity and microclimate. Presently, the County administers an oak tree ordinance that has provisions for mitigation of potential impacts and replacement of oak trees but not necessarily oak woodland habitat values. In addition, qualified biologists and certified arborists are available to provide tree-specific recommendations for management. For the purpose of this study, however, these approaches should be followed only after considerations are made for the avoidance of oaks and all other native trees. This is particularly acute when dealing with woodlands that have their own distinct community character and provide unique and valuable habitat for many plant and animal species. Consideration for resource conservation areas and buffer area setbacks should also extend to non-riparian/upland woodlands. Recommended guidelines for this purpose are outlined below.

- Establish non-riparian/upland woodland resource conservation areas with a minimum outer boundary of the dripline of edge trees in the target woodland.
- Designate resource conservation areas as use exclusion areas and prohibit ground disturbing activities and vegetation removal.
- Establish buffer areas adjacent to and around resource conservation areas with minimum buffer setbacks of 150 feet measured from the edge of resource conservation areas.

- Measure buffer setbacks horizontally, in plan view, since they are intended to serve as spatial buffers; consider lesser setbacks if topography and/or other physical features are determined to provide adequate screening and buffering.
- Designate buffer areas as limited use areas; compatible uses include agriculture and grazing, passive recreation (hiking, riding, golf and parks with no night lighting), and brush thinning for fire hazard reduction (no removal of trees).

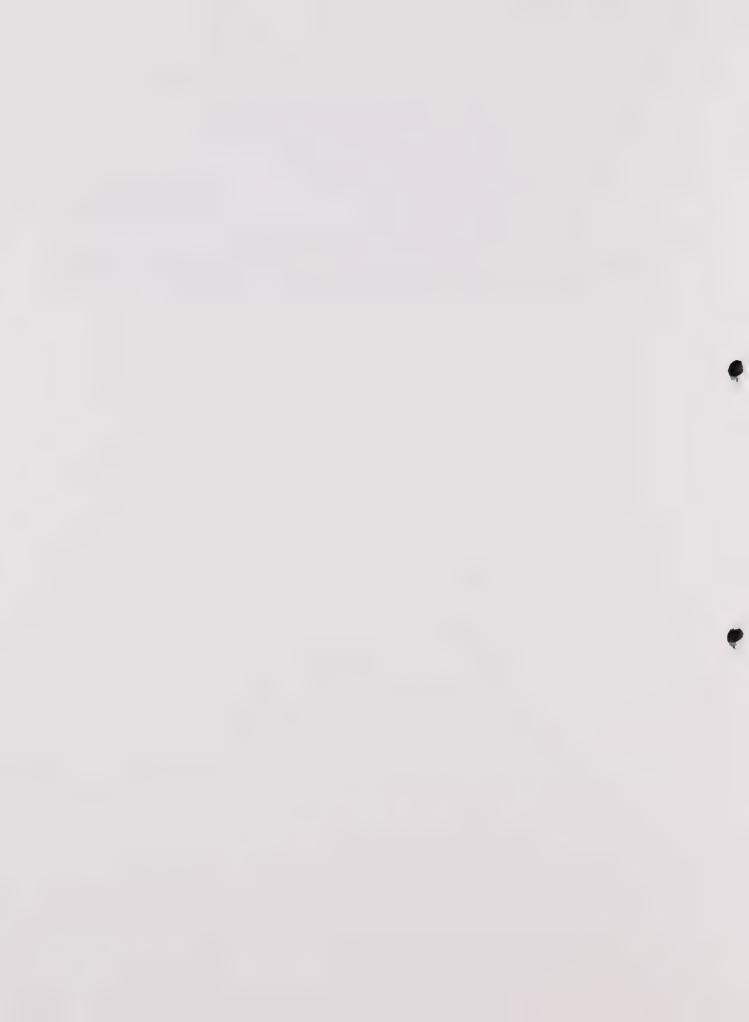
The above guidelines are intended as a general rule for the treatment of non-riparian/upland woodland habitats. At times, land uses may necessitate encroachment into the recommended resource conservation areas and buffer areas due to topography or other constraints and road and utility placement. In these cases the following guideline is recommended:

• If necessary, encroachment of land uses other than those considered as compatible above should be minimized.



APPENDIX A

1976 Criteria for Selecting and Classifying SEAs



Criteria for Selecting and Classifying Significant Ecological Areas

CLASS 1 - The habitat of rare, endangered, and threatened plant and animal species.

These areas are important for the maintenance of plant and animal species that are recognized as being either extremely low in numbers or having a very limited amount of habitat available. The terms rare, endangered, and threatened have precise meanings defined in both state and federal law.

State of California

Rare – An animal of a species or subspecies of birds, mammals, fish, amphibia, or reptiles that, although not presently threatened with extinction is in such small numbers throughout its range that it may be endangered if its environment worsens.

Endangered – An animal of a species or subspecies of birds, mammals, fish, amphibia, or reptiles the prospects of which are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

United States Government

Threatened – Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Endangered – Any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary (of the Interior) to constitute a pest whose protection under the provisions of this Act would present an overwhelming and overriding risk to man.

Severe penalties can be imposed for destroying individual organisms or their habitat. The California Department of Fish and Game, and the United States Fish and Wildlife Service publish official lists of rare, endangered, and threatened species. Both agencies recognize mammals, birds, reptiles, and amphibians, but only the Fish and Wildlife Service is empowered to recognize insects and plants.

The literature on rare, endangered, and threatened species is extensive, and increasing all the time. This information was used to identify existing habitat in Los Angeles County.

CLASS 2 – Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution on a regional basis.

The purpose of this criteria is to identify biotic resources that are uncommon on a regional basis. The geographical region considered could be as small as the southern California coastal plains, the transverse mountain ranges, the Mojave Desert, the southern California coastline, etc; or they could be as large as southern California, the Pacific coast, all of California, the western United States, or even larger. The point being that community, association, or habitat is either unique or restricted in distribution in an area larger than the political boundaries of Los Angeles County. Resources that are limited in distribution in an area larger than the political boundaries of Los Angeles County. Resources that are limited in distribution in the region being considered, but common elsewhere, are also included under this category.

CLASS 3 – Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution in Los Angeles County.

The purpose of this criteria is to identify biotic resources that are uncommon within the political boundaries of Los Angeles County, regardless of their availability elsewhere. The County has a high diversity of biological components. It and San Diego County are the only counties in the United States that possess coastal, montane, and desert communities within their boundaries. It is a rich heritage that few local governments can attempt to preserve.

Many of the communities that were once common in Los Angeles County have been severely reduced due to urban and agricultural development. This is especially true south of the San Gabriel Mountains, and among the agricultural fields of the north County. Other biotic features have never been common.

CLASS 4 – Habitat that as some point in the life cycle of a species or group of species, serves as a concentrated breeding, feeding, resting, or migrating grounds, and is limited in availability.

Certain areas tend to concentrate a species or group of species at various points in their life cycles. These areas possess specialized characteristics that are essential to the maintenance of wildlife. This criteria is intended to identify those areas that are limited in distribution, and not the specialized habitat of a common species or group of species.

CLASS 5 – Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or they represent an unusual variation in a population or community.

Oftentimes scientists learn the most about biological phenomenon by studying it at an extreme in its distribution. This reveals what the extremes are under which it can survive.

In addition, isolated populations and communities are often relicts of what was present in an area at some previous time, and often show genetic traits not found elsewhere in the species. These characteristics may be useful in determining taxonomic relationships.

CLASS 6 – Areas important as game species habitat or as fisheries.

The criteria was designed to identify areas that are critical to the maintenance of game and fish populations in Los Angeles County.

CLASS 7 – Areas that would provide for the preservation of relatively undisturbed examples of natural biotic communities in Los Angeles County.

The intent of this criteria was to identify examples of the more common biotic resources in Los Angeles County. As often as possible, the areas selected:

- 1. were completely of nearly undisturbed
- 2. had a diversity of habitats
- 3. were large enough to support a representative sample of the native fauna.
- 4. were more or less isolated from outside impacts, such as a self-contained watershed or isolated mountain peak.

Examples of each vegetation type were selected from the various geographical regions in the County in order to preserve geographic diversity.

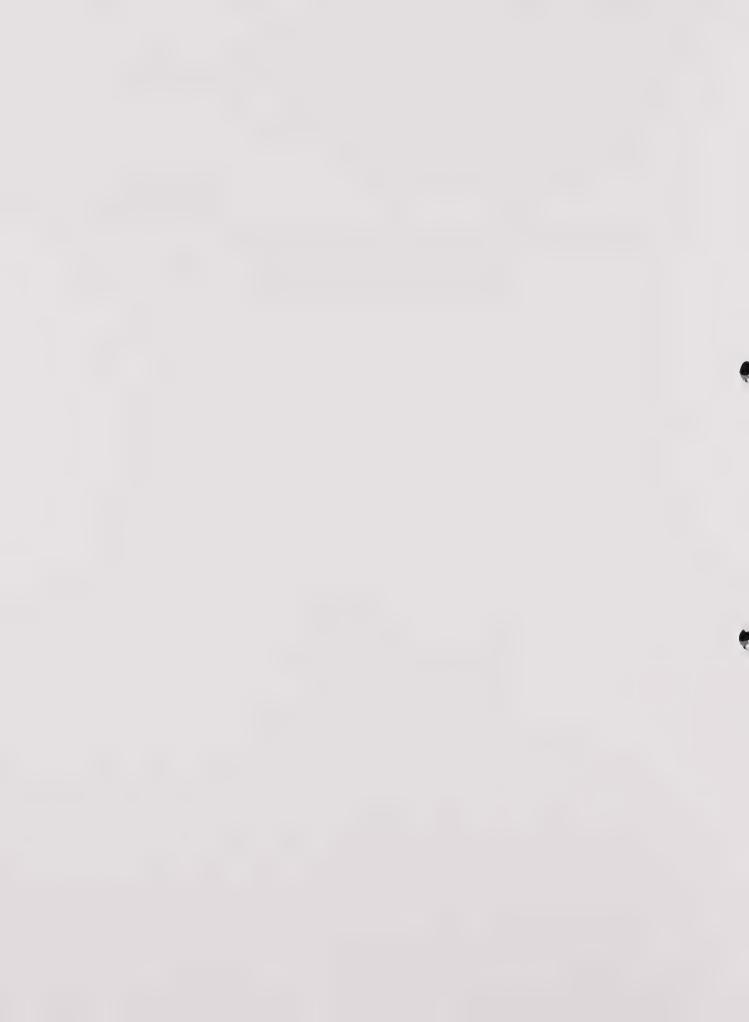
CLASS 8 - Special areas.

Certain areas that are worthy of inclusion, but that do not fit any of the above criteria, should be pointed out at this time. Each area has its own special characteristics that are discussed on the individual area description sheets.



APPENDIX B

City and County Survey Responses



Los Angers County SEA Update Sady City & County Survey Questionnaire

Date Received:	Respondent:	Summary of Comments:	Response:
10-21-99	City of Claremont Community Development Department 207 Harvard Avenue Claremont, CA 91711-0880 Contact: Jennifer Craven, Assistant Planner	Remove SEA #26 (San Antonio Canyon Mouth) from the County's list due to approved and built development, as well as, other disturbances to the area.	Due to remaining biological resources of regional significance, principally extensive undisturbed alluvial fan scrub, this SEA is proposed to be retained and consolidated into the proposed San Dimas Canyon/San Antonio Wash SEA.
12-20-99	City of Diamond Bar 21660 E. Copley Drive, Suite 100 Diamond Bar, CA 91765-4177 Contact: James DeStefano, Deputy City Manager	Modify the boundaries of SEA #15 (Tonner Canyon/Chino Hills) to include only the area located in the unincorporated County. The City is opposed to any expansion or additional SEAs within City boundaries or its Sphere of Influence. The City maintains a Significant Ecological Area Technical Advisory Committee as a component of its development review and environmental evaluation process. The City also requires development meet special conditions under a Hillside Conditional Use Permit and Hillside Management Ordinance.	Existing SEA #31 has been consolidated with the proposed Puente Hills SEA, including areas within the City and spheres of influence. This is due to the inter-relationship with region-wide ecological systems throughout the Puente/Chino Hills region.
12-01-99	City of Glendale 633 E. Broadway, Rm. 103 Glendale, CA 91206-4386 Contact: David Bobardt, Senior Planner	City acknowledges SEA #40 (Verdugo Mountains), in its General Plan Open Space and Conservation Elements, even though a 572-unit development in the SEA is currently pending. Often, most sensitive biological areas are set aside for protection during development review. City's Hillside Ordinance provides further direction on this issue.	Existing SEA #40 was not studied due to its location outside of the unincorporated jurisdiction. Existing SEAs within city boundaries are retained as originally approved.
11-03-99	City of Glendora Department of Planning & Redevelopment 116 E. Foothill Boulevard Glendora, CA 91741 Contact: Bill Rodrigues, Assistant Planner	No SEAs are located within the City boundaries, but the General Plan promotes protection of biotic resources, including the San Gabriel Mountains live-forever (<i>Dudleya densiflora</i>).	Existing SEA #45 (<i>Dudleya densiflora</i> Population) is consolidated into the San Gabriel Canyon SEA which also includes additional areas supporting the species. A portion of existing SEA #45 is located within the City of Glendora. In correspondence dated November 3, 1999, the City noted that areas with <i>Brodiaea filifolia</i> are designated Open Space in the zoning and General Plan classifications. The portion within the city will be retained as an SEA.
11-09-99	City of La Verne 3660 D Street La Verne, CA 91750 Contact: Hal Frederickson, Community Development Director Ili Lobaco, Graduate Planning Intern	City supports SEA #25 (San Dimas Canyon) and agrees it should continue to be classified as a SEA. City General Plan contains a Resource Management Chapter including policies and implementation measures to address biological resources.	San Dimas Canyon, including the entire existing SEA #25 has been consolidated into the proposed San Dimas Canyon/San Antonio Wash SEA.

Los Angeles County SEA Update Study City & County Survey Questionnaire

Date Received:	Respondent:	Summary of Comments:	Response:
10-04-99	City of Long Beach Planning & Building Department City Hall, Fourth Floor Long Beach, CA 90802	Biotic resources within the City are addressed under the PD (Planned Development) zoning designation. There are no other mechanisms in place.	The City of Long Beach recently acquired Alamitos Bay, an existing SEA, through annexation. This area was not studied due to its location outside of the unincorporated jurisdiction. Existing SEAs within city boundaries are retained as originally approved.
10-20-99	City of Los Angeles Los Angeles Department of City Planning 221 South Figueroa, Ste. 210 Los Angeles, CA 90012 Contact: Anne Howell	LA City responses were received on the following existing SEAs: #11 (Temescal/Rustic/Sullivan Canyons), #13 (Chatsworth Reservoir), #14 (Simi Hills), #21 (Santa Susana Pass), #24 (Tujunga Valley/Hansen Dam), #29 (Ballona Creek), #33 (Terminal Island), #35 (Harbor Lake Regional Park), #37 (Griffith Park), #39 (Encino Reservoir), and #40 (Verdugo Mountains). Zoning designations for these SEAs are as follows unless noted otherwise below. Publicly owned land in an SEA is zoned open space, whereas privately owned land in an SEA will have open space, agricultural or very low-density designations. SEA #24: a portion of the Tujunga Wash has been approved for a golf course. Delete portions of SEA #28 along the east boundary because it is not included in the habitat protection project for the El Segundo Blue Butterfly. Portions of SEA #29, Ballona Creek, are proposed or approved for restoration. A large commercial-residential-recreation-industrial project is approved for a major portion of the area NE of SEA #29. SEA #29 should be modified to include restoration areas and delete developed areas. SEA #33 should be deleted because the Least Tern nesting site has been relocated to the outer harbor. In SEA #35, the area north of Pacific Coast Highway should be deleted due to residential development.	Existing SEAs #11 and #39 have been included within the proposed Santa Monica Mountains SEA. Existing SEAs #13, #14, and #21 have been consolidated into the proposed Santa Susana Mountains/Simi Hills SEA. SEAs #24, #33, #35, #37, and #40 are entirely outside lands within County jurisdiction. Existing SEAs #24, #33, #35, #37 and #40 were not studied due to location of these areas outside of the unincorporated jurisdiction. With exception to SEA #33, existing SEAs within city boundaries are retained as originally approved. SEA #33 (Terminal Island) can be deleted; in correspondence dated October 19, 1999, the City recommended that SEA #33 be relocated to new land created in the outer harbor area. According to the City, this recommendation was made by the U.S. Fish and Wildlife Service, and State Department of Fish and Game. Existing SEA #29, Ballona Creek, was not a part of the study, and it will be retained as originally approved. The analysis of this SEA is undergoing an independent review by a joint County/City of Los Angeles Local Coastal Program study. No changes are proposed to this SEA until an assessment of existing conditions has been completed by this study. Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved. The analysis of this area is also pending an independent review by a joint County/City of Los Angeles Local Coastal Program study. No changes are proposed until an assessment of existing conditions has been completed. Existing SEA #28 will be retained as originally approved.

Los Angers County SEA Update Sady City & County Survey Questionnaire

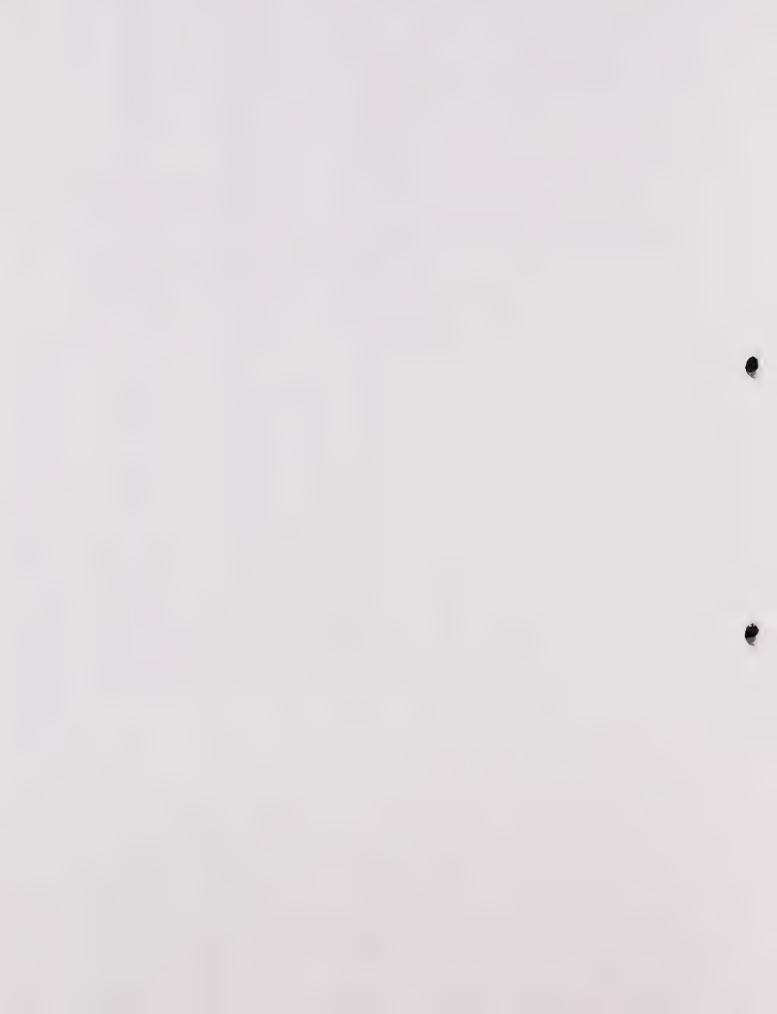
Date Received:	Respondent:	Summary of Comments:	Response:
12-15-99	City of Monrovia 415 South Ivy Avenue Monrovia, CA 91016-2888 Contact: Robert A. Kastenbaum, Director of Community Development Craig Jimenez, Alice Griselle	City Council approved resolution 99-68 on 12-14-99, nominating the Monrovia Hillside an SEA. This area is located east of Arcadia's City limits, south of the Angeles National Forest and west of Monrovia Canyon Park. The site is approximately 957 acres in size.	The entire area nominated has been consolidated into the proposed San Gabriel Canyon SEA.
02-16-99	City of Rancho Palos Verdes 30940 Hawthorne Blvd. Rancho Palos Verdes, CA 90275-5391 Contact: David Snow, Principal Planner	Request the final document note that the SEAs in the City (existing SEA #27 – Portuguese Bend Landslide, #31 – Rolling Hills Canyons, and #32 – Agua Amarga Canyon) do not fall under County regulatory guidelines. Slope regulations, open space hazard zoning, and overlay zones for natural areas are tools that Rancho Palos Verdes uses to protect biotic resources. However, special planning recognition is not directly attributed to SEA designations. In fact, several projects have been approved and two projects are currently pending within the SEAs. The City is currently preparing a Natural Communities Conservation Plan (NCCP).	These SEAs are located outside of the unincorporated area. Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved.
11-02-99	City of Rolling Hills No. 2 Portuguese Bend Road Rolling Hills, CA 90274 Contact: Lola Ungar	Preservation of natural habitat in the City is called out in the City's General Plan and reflected in its zoning ordinance. Deeply wooded hillsides and canyons or natural drainages that have also been designated as existing County SEAs are considered Open Space Resources and are defined as Canyon Open Space. Special conditions typically apply to such areas.	Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved.
11-29-99	City of Santa Clarita Planning & Building Services 23920 Valencia Blvd., Ste. 300 Santa Clarita, CA 91355-2196 Contact: Jeff Lambert, Director	Recommend approximately 3,800 acres in portions of Placerita, Whitney, Los Pinetos & Elsmere Canyons and Los Pinetos Spring be designated as an SEA.	The subject area is consolidated into the proposed Santa Clara River SEA.
10-20-99	City of South El Monte 1415 N. Santa Anita Avenue South El Monte, CA 91733 Contact: Gary Dean Myrick, Director of Community Development	City is unaware of any biotic resources within their boundaries.	Reconfigured SEA #42 will no longer extend into the jurisdiction of South El Monte.

Los Angeles County SEA Update Study City & County Survey Questionnaire

Date Received:	Respondent:	Summary of Comments:	Response:
11-18-99	City of Torrance Planning Department 3031 Torrance Blvd. Torrance, CA 90509-2970 Contact: Tony Gardea	SEA #36 (Madrona Marsh), is maintained as a natural preserve, which was dedicated to the City, but is now smaller than the original SEA due to the Park Del Amo planned development.	Existing SEA #36 is not within the unincorporated area and was not studied. SEAs within city boundaries are retained as originally approved.
12-16-99	City of Whittier 13230 Penn Street Whittier, CA 90602-1772 Contact: Thomas Mauk	Whittier City Council passed a resolution urging LA County to restore SEA #44 (Sycamore and Turnbull Canyons) to the original pre-1980 boundaries, incorporating Sycamore Canyon, Dark Canyon, & portions of Turnbull Canyon. Sent follow-up letter regarding SEA #44 and to support for the nominations submitted by Wildlife Corridor Conservation Authority (WCCA).	Consistent with development patterns over the past 20 years, existing SEA #44 has been expanded and consolidated into the proposed Puente Hills SEA. This also corresponds to the nomination submitted by WCCA.
11-04-99	Kern County Planning Department 2700 M Street, Suite 100 Bakersfield, CA 93301-2323 Contact: Steve Strait	Kern County does not have a land use designation or other form of program to identify, protect or monitor biological resources.	While Los Angeles County has no jurisdiction to designate SEAs in Kern County, connection with areas of biotic significance outside of Los Angeles County can be accomplished through the proposed San Andreas Rift Zone SEA.

APPENDIX G

SEA Nomination Table



Los Angers County SEA Update Sady SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
12-15-99	Altadena Foothill Conservancy Planning 153 Jaxine Drive Altadena, CA 91001-3817 Contact: Lori Paul	Nominated a section of the Altadena Foothills in the San Gabriel Mountain foothill corridor, between Arroyo Seco and Hastings Canyon.	A field analysis determined that the Altadena Foothills do not contain biotic resources with significant regional resource values, as those found within the proposed San Gabriel Canyon and San Dimas Canyon/San Antonio Wash SEAs. This area, therefore, is not proposed as an SEA, but may be designated as "Open Space" in the Los Angeles County General Plan.
12-01-99	Ballona Ecosystem Education Project & Save All of Ballona 6038 75 th St. Los Angeles, CA 90045 Contact: Rex Frankel Spirit of the Sage Council 1122 Oak Street Santa Monica, CA 90405 Contact: Kathy Knight	Nominated an expansion of Ballona Creek SEA #29 to include 1,087-acre lowland and 44-acre undeveloped bluff, total acres – 1,130. Pictures, maps, articles and species information on file with DRP in room 1356.	Existing SEA #29, Ballona Creek, was not a part of the study, and it will be retained as originally approved. The analysis of this SEA is undergoing an independent review by a joint County/City of Los Angeles Local Coastal Program study. No changes are proposed to this SEA until an assessment of existing conditions has been completed by this study. Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved. The analysis of this area is also pending an independent review by a joint County/City of Los Angeles Local Coastal Program study. No changes are proposed until an assessment of existing conditions has been completed.
12-07-99	Brown, David 5860 Belbert Circle Calabasas, CA 91302 Contact: David Brown	Nominated Solstice Canyon watershed	Solstice Canyon has been consolidated with the proposed Santa Monica Mountains SEA.
12-01-99	California Department of Parks and Recreation, Angeles Division 1925 Las Virgenes Road Calabasas, CA 91302 Contact: Russ Dingman, District Planner	 The following areas were nominated: Solstice Canyon watershed area, especially where Corral Canyon and Pacific Coast Highway cross the stream; Watershed of Arroyo Sequit, approximately 4,500 acres (half of which is state or federal parkland); Area that borders the northwest side of Malibu Creek State Park; 32 acre inholding in Malibu Creek State Park; Liberty Canyon Natural Preserve Area; An area just east of Malibu Lake; North slope of Castro Peak; Bulldog Canyon watershed located along the west side of Malibu Creek State Park; Expand the Malibu Creek State Park Buffer SEA/April Road; Additions to the Cold Creek SEA bordering on the west side and the north and northeast sides of the SEA, including Calabasas Peak. 	All of the areas nominated have been consolidated with the proposed Santa Monica Mountains SEA.

Los Angeles County SEA Update Study SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
12-15-99	California Native Plant Society – Los Angeles/Santa Monica Mtns. Chapter 3908 Mandeville Canyon Road Los Angeles, CA 90049 Contact: Betsey Landis, Vice President, Education	The following nominations were made for eight Regional SEAs, with boundaries that correspond with major watershed areas and natural drainage channels: • The entire Santa Catalina Island, excluding Avalon, Two Harbors, the Airport, Wrigley Ranch, and some private holdings, which total approximately 42,400 acres;	The entire Santa Catalina Island, excluding Avalon and other developed areas, has been proposed as an SEA.
		Western Antelope Valley, Mojave Desert, Portal Ranch, Liebre Mtn., Angeles National Forest, and SEAs #57 (Fairmont and Antelope Buttes), #58 (Portal Ridge/Liebre Mountain), & #60 (Tehachapi Foothills);	• The proposed San Andreas Rift Zone and Joshua Tree Woodland SEAs include existing SEAs #57, #58 and #60 and key biotic resources. Portions of the nomination were not included where field survey found no significant resources. The proposed SEAs do not include Amargosa Creek due to high levels of disturbance along its course through the cities of Palmdale, Quartz Hill, and Lancaster.
		• Little Rock Wash, Big Rock Wash, eastern Mojave, and the northern San Gabriel Mtns. watershed. Located within this area are SEAs #47 (Edwards AFB), #48 (Big Rock Wash), #49 (Little Rock Wash), #50 (Rosamond Lake), #51 (Saddleback Butte State Park), #53 (Lovejoy Butte), #54 (Piute Butte), #55 (Desert – Montane Transect) and the Angeles National Forest;	• Existing SEAs #47, #48, #49, #50, #51, #53, #54, #55, and a substantial portion of the other areas nominated have been included in the proposed Antelope Valley SEA. The proposed SEA differs from the nomination in two ways: 1) Areas within the National Forest are recognized, but are outside the unincorporated jurisdiction. These areas are designated as "Open Space" on the Los Angeles County General Plan Land Use Policy Map and, 2) a northeasterly region was not included.
		• Santa Clara River and its watersheds. Located within this area are SEAs #19 (San Francisquito Canyon), #20 (Santa Susana Mountains), #23 (Santa Clara River), #63 (Lyon Canyon), #64 (Valley Oaks Savannah) and the Angeles National Forest;	• Existing SEAs #19 and #23 along with several other tributaries to the Santa Clara River have been included in the proposed Santa Clara River SEA. Existing SEAs #20, #63, and #64 have been included in the proposed Santa Susana Mountains/Simi Hills SEA. These proposed SEAs do not include large portions of the National Forest and the entire Santa Clara River watershed. Areas within the National Forest are recognized, but are outside the unincorporated jurisdiction; these areas are designated as "Open Space" on the Los Angeles County General Plan Land Use Policy Map. While this study advocates appropriate watershed management practices, a field survey determined that regionally significant biotic resources did not exist in a number of nominated areas.

Los Angers County SEA Update Sady SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
12-15-99 (cont.)	California Native Plant Society –	Santa Monica Mtns., Simi Hills and Baldwin Hills as a wildlife corridor;	Undeveloped portions of the Santa Monica Mountains, including existing SEAs and connections to the Simi Hills have been proposed as a regional SEA. The Los Angeles County undeveloped portions of the Simi Hills are also included as part of the proposed Santa Susana Mountains/ Simi Hills SEA. Developed areas and/or areas outside of Los Angeles County jurisdiction are not included. These are found in the vicinity of Agoura, the western Santa Monica Mountains, and Baldwin Hills.
		• Los Angeles River System. Located within the watershed area are SEAs #13 (Chatsworth Reservoir), #14 (Simi Hills), #20 (Santa Susana Mountains), #21 (Santa Susana Pass), #24 (Tujunga Valley – Hanson Dam), #33 (Terminal Island), #35 (Harbor Lake Regional Park), #37 (Griffith Park), #40 (Verdugo Mountains), #46 (Tujunga Spreading Grounds) and numerous canyons, creeks and other water channels;	Canyon SEA. In these cases, proposed SEAs include much larger areas than the existing SEAs. Existing SEAs within
		• San Gabriel Valley River System. Located within the watershed area are SEAs #15 (Tonner Canyon – Chino Hills), #16 (Buzzard Peak – San Jose Hills), #17 (Powder Canyon – Puente Hills), #22 (Santa Fe Dam Floodplain), #25 (San Dimas Canyon), #26 (San Antonio Cyn Mouth), #30 (Alamitos Bay), #41 (Rio Hondo Spreading Grounds), #42 (Whittier Narrows), #43 (Rio Hondo College), #44 (Sycamore – Turnbull Canyons), #45 (<i>Dudleya Densiflora</i> Population) and Frank G. Bonnelli County Park;	• Existing SEAs #15, #16, #17, #25, #26, #42, #44, #45, and a substantial portion of other areas nominated have been incorporated into either the proposed Puente Hills SEA, the proposed East San Gabriel Valley SEA, the proposed San Gabriel Canyon SEA, or the proposed San Dimas Canyon/San Antonio Wash SEA. In these cases, proposed SEAs include much larger areas than the existing SEAs. However, most of the remaining undeveloped portions of the nominated SEA are entirely outside lands within County jurisdiction including existing SEA #30. Existing SEAs within city boundaries are not a part of the study and are

Los Angeles County SEA Update Study SEA Nominations

		Comments/	
Date:	Respondent:	Area(s) Nominated:	Response:
12-15-99 (cont.)	California Native Plant Society –		being retained as originally approved. The Rio Hondo Spreading Grounds (#46) within the City of Industry, was originally identified by the England and Nelson study in 1976 as a prospective SEA; subsequent analysis prior to adoption of the 1980 General Plan revision determined that biotic resources within this area were not significant. Consequently, this area is designated as "Open Space" on the Los Angeles County General Plan. The "Open Space" designation will be retained. Existing SEA #22 was not proposed due to isolation by surrounding development and lack of long-term sustainability. Based on field study, SEA #43 is isolated from the proposed Puente Hills SEA and does not contribute significantly to regional biological value. Therefore, SEA #43 is not proposed to be retained in this study. Finally, the San Gabriel River has been designated as "Open Space" in the Los Angeles County General Plan. The Open Space designation will be retained.
		 Palos Verdes Peninsula and coastline from the peninsula to El Segundo Dunes. Located in this watershed area are SEAs #27 (Portuguese Bend Landslide), #28 (El Segundo Dunes), #31 (Rolling Hills Canyons), #32 (Agua Amarga Canyon), and #34 (Palos Verdes Peninsula Coastline). Specific comments pertaining to existing SEAs also included 	• None of the existing SEAs or other open space referenced are proposed as part of the update study due to either their location entirely outside of lands within County jurisdiction or the lack of significant biological resources. It is important to note, however, that existing SEAs within city boundaries are being retained as originally approved.
		the following: • Eliminate SEA #18 (Way Hill) and establish Frank G. Bonelli County Park as an SEA.	• Existing SEA #18 is not proposed as part of this update study due to disturbance which has eliminated the population of <i>Dudleya multicaulis</i> , for which the SEA was originally designated. Frank G. Bonelli County Park has been consolidated into the proposed East San Gabriel Valley SEA.
		• Retain SEA #36 (Madrona Marsh)	• SEA # 36 is located outside of the unincorporated jurisdiction. Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved.
2-10-00	Diamond Bar East Partners 3480 Torrance Boulevard, Suite 300 Torrance, CA 90503 Contact: Kurt Nelson	Opposes the inclusion of two graded and developed properties in Diamond Bar within the area nominated by the Wildlife Corridor Conservation Authority.	The proposed Puente Hills SEA includes most of the open space remaining in the unincorporated portion of the Puente Hills and Chino Hills area; the SEA also includes natural areas of the Whittier Narrows Recreation and Flood Control Basin. Existing Seas #15, #42, and #44 are consolidated with the SEA with minor boundary modifications. The focus of this study

Los Angers County SEA Update Sady SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
			and the proposed SEAs is on regionally sustainable areas with regionally significant biotic resources.
12-15-99	Endangered Habitats League PMB 592, 8424-A Santa Monica Blvd. Los Angeles, CA 90069-4267 Contact: Dan Silver, Coordinator	Would like Los Angeles County to take a more forward- thinking and comprehensive approach to protecting natural habitats. Suggested Riverside County's Multiple Species Habitat Conservation Plan as a model.	In addition to maintaining biological diversity throughout the County, the SEA Update Study emphasized current approaches to conservation biology, including a multi-species approach, larger SEA designations, and the need for connectivity.
12-09-99	Environment Now 11777 San Vicente Blvd, Suite 555 Los Angeles, CA 90049 Contact: David Myerson, Park to Playa Coordinator	Nominated Baldwin Hills area located in West Los Angeles, south of Jefferson Blvd, west of La Brea Avenue, north of Slauson Avenue and east of Jefferson Blvd., which totals approximately 800 acres of open space. This area could be linked to the Ballona Creek SEA.	Baldwin Hills is a highly disturbed area that was included as a prospective SEA under the England and Nelson Study in 1976, based on likely restoration. Subsequent analysis, prior to adoption of the 1980 General Plan revision determined that biotic resources within this area were not significant. The area was designated in the Los Angeles County General Plan as "Open Space." Circumstances have not changed since 1980 and the area remains of limited significant biotic value. Designation as an SEA is, therefore, not proposed; the "Open Space" designation will be retained.
03-31-00	Friends of the Santa Clara River 660 Randy Drive Newbury Park, California 91320-3036 Contact: Ron Bottroff, Chair	Supports the California Native Plant Society nomination of a regional SEA including the slopes and drainages that comprise the watershed of the Santa Clara River in Los Angeles County.	See California Native Plant Society.
11-24-99	Garris, Judy 7402 Remmet Avenue Canoga Park, CA 91303 Contact: Judy Garris	Nominated the Santa Susana Mountains and the Simi Hills.	The undeveloped portions of the Santa Susana Mountains and the Simi Hills located within Los Angeles County are proposed as a single regional SEA.
11-15-99	Hacienda Heights Improvement Assoc. 1622 S. Adalia Avenue Hacienda Heights, CA 91745 Contact: Jeff Yann, Environmental Chair	Expressed support for a large SEA that encompasses the Puente/Chino Hills Wildlife Corridor (see submittal by the Puente/Chino Hills Wildlife Corridor Conservation Authority) and retention of SEAs #17 (Powder Canyon/Puente Hills) and #44 (Sycamore and Turnbull Canyons). Specifically nominated the addition of three areas adjacent to SEA #44: • Canyons south & west of Seventh & Orange Grove Avenues; • Canyons on the south slope of Oak Canyon; • Canyon on the west end of Vallecito to Workman Hill.	SEAs #17 and #44 have been retained within a much larger area proposed as the Puente Hills SEA. The majority of the three nominated areas have been included as well.

Los Angeles County SEA Update Study SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
11-22-99	Los Cerritos Wetlands Task Force 5710 East Seventh St., Suite 168 Long Beach, CA 90803 Contact: Don May, President	Relist the Los Cerritos Wetland as an SEA. This would be an 85-acre parcel, much smaller than the original 2,400 acre San Gabriel River Estuary. It is more accurately described as the Los Cerritos Tidal Salt Marsh located in the southeast corner of Long Beach.	This area was not considered for designation as a County SEA due to its location entirely within the City of Long Beach.
		(submittal included a video tape)	
12-21-99	Monrovia Mountain Conservancy PO Box 522 Monrovia, CA 91017	Supports the Monrovia mountains and foothills as a SEA.	Undeveloped portions of the Monrovia mountains and foothills have been incorporated into the proposed San Gabriel Canyon SEA.
	Contact: Stephanie Granger Kurzweil, President		
12-20-99	National Audubon Society 6042 Monte Vista Street Los Angeles, CA 90042 Contact: Mike San Miguel	Nominated approximately 27 acres adjacent to the Santa Anita Wash, at the mouth of Santa Anita Canyon, in the City of Arcadia.	Whereas, the mouths of several other canyons exiting the San Gabriel Mountains have been proposed as SEAs, the nominated area was not due to its location within an active groundwater recharge facility. However, Santa Anita Canyon upstream of the Dam is proposed as part of the San Gabriel Canyon SEA.
11-30-99	Natural History Club of Acton/Agua Dulce PO Box 965 Acton, CA 93510 Contact: Stacey Nickels, President	Nominated the entire area of the Santa Clara River including a buffer from its headwaters in the San Gabriel Mountains, east of Acton, to the City of Santa Clarita limits, west of Agua Dulce. Also, include Vasquez Rocks County Park in the SEA.	The proposed Santa Clara River SEA includes the Santa Clara River, several tributary drainage areas, adjacent buffer area and Vasquez Rocks County Park.
3-15-00	Puente Hills Landfill Native Habitat Conservation Authority 1955 Workman Mill Road Whittier, CA 90601 Contract: Bob Henderson, Chair	Requested the active disposal area of the Puente Hills Landfill, as included in the area nominated by the Wildlife Corridor Conservation Authority, be removed from SEA consideration.	In drafting the boundaries of the proposed Puente Hills SEA, active disposal areas, as evident from recent aerial photography, were excluded from SEA consideration. Based on past approvals, certain areas are already approved for SEA status.
11-16-99	Resource Conservation District of the Santa Monica Mountains 122 North Topanga Canyon Blvd. Topanga, CA 90290 Contact: Rosi Dagit	Suggested that the most appropriate way to afford protection of region-wide resources would be to create a Santa Monica Mountains SEA which included all undeveloped lands that are not already under public ownership. Specifically, focused on the following areas: • Lower Topanga Canyon; • Upper areas of Old Topanga Canyon (sub-drainage); • Expand Tuna Canyon SEA (#10) to include all adjacent significant portions of the watershed and Little Las Flores Canyon.	A Santa Monica Mountains SEA similar to the nominated is proposed, including existing SEA #3 (Zuma Canyon), #3A (Buffer), #3B (Buffer), #4 (Upper La Sierra Canyon), #5 (Malibu Canyon and Lagoon), #B5 (Buffer), #6 (Las Virgenes), #8 (Malibu Creek State Park Buffer Area), #9 (Cold Creek), #10 (Tuna Canyon), #11 (Temescal-Rustic-Sullivan Canyons), #12 (Palo Comado Canyon) and #39 (Encino Reservoir), and additional areas considered.

Los Angers County SEA Update Sudy SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
12-14-99	San Gabriel Mountains Regional Conservancy (SGMRC) PO Box 963 Glendora, CA 91740 Contact: Dr. Ann Croissant	Recommended that SEA designation take a more strategic regional approach pointing out the need to protect watershed and wildlife corridor areas. Example SEAs based on this approach include: • San Gabriel Foothills and Mountains • San Gabriel River and its tributaries • San Gabriel Valley ridgelines	For the reasons suggested, the San Gabriel Mountain Foothills, the Puente Hills, and the East San Gabriel Valley SEAs are proposed. The analysis also determined that the San Gabriel River and its tributaries are channelized; under these circumstances an SEA designation is not appropriate, though the river can be designated as "Open Space" in the Los Angeles County General Plan.
11-14-99	Santa Monica Mountains Task Force / Sierra Club Angeles Chapter PO Box 344 Woodland Hills, CA 91365-0344 Contact: David Brown	Nominated the following areas: • Five acres along Malibu Creek State Park; • Area between Ventura Freeway & Liberty Canyon; • Area between Castro Park, Malibu Creek State Park, Malibu Lake Community, & Peter Strauss Ranch; • Solstice Canyon rises on Castro Park; • Watershed of Arroyo Sequit; • West border of Cold Creek SEA.	All of the nominated areas have been consolidated into the proposed Santa Monica Mountains SEA.
12-02-99	Santa Susana Mountain Park Assoc. 5922 Corbin Avenue Tarzana, CA 91356 Dorian Keyser, Vice-President and Lands Committee Chair	Retain and expand SEAs #14 (Simi Hills) and #13 (Chatsworth Reservoir) to insure the inclusion of the Chatsworth Nature Preserve/Reservoir and portions of Simi Hills. Expand the Santa Susana Pass State Historic Park.	Existing SEAs #13 and #14 have been consolidated into the proposed Santa Susana Mountains/Simi Hills SEA.
12-13-99	SCOPE Santa Clarita Organization for Planning the Environment PO Box 1182 Santa Clarita, CA 91386 Contact: Michael Kotch	 The following comments were provided: Supports the Sierra Club's nomination of the three adjacent watersheds in Elsmere, Whitney and Placerita Canyons east of the 14 Freeway as one SEA; Request that an additional criterion be added to the program: aquifer re-charge areas; 	 These canyons have been consolidated into the proposed Santa Clara River SEA. An analysis of aquifer re-charge areas, as a distinct criterion, was beyond the scope of the SEA update study. It should be noted, however, that biological/ hydrological relationships were used in part to delineate the boundaries of the proposed Antelope Valley SEA.
		Oppose any SEA reduction.	• As a general approach, consistent with current conservation planning practices, proposed SEAs include existing SEAs, as well as expanses of land in between these areas; consolidating areas situated between SEAs provides connectivity. Following this approach, the area of SEAs were significantly increased in size. Reduction of SEAs occurred only rarely in unincorporated Los Angeles County, where development or reduction of biotic resources failed to justify retainment of the SEA designation.

Los Angeles County SEA Update Study SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
12-07-99	Scully, Marcia 6292 Hillside Lane Whittier, CA 90601-3832 Contact: Marcia Scully	All open space within the jurisdiction of the Whittier/ Puente Hills Conservation Authority, generally delineated by I-605 on the west, SR-60 on the north, Hacienda Boulevard on the east, and Whittier Boulevard on the south.	The majority of the open space within the nominated area has been included in the proposed Puente Hills SEA.
9- 21-99	Sierra Club – Santa Clarita Valley & SCV Canyons Preservation Committee 26617 Gavilan Drive Santa Clarita, CA 91350 Contact: Karen Pearson	Nominated: • Whitney Canyon • Elsmere Canyon • Placerita Canyon (combined, these areas total 4,390 acres).	These canyons have been consolidated into the proposed Santa Clara River SEA.
11-22-99	Sierra Club, Angeles Chapter Conservation Committee 3435 Wilshire Blvd., Ste. 320 Los Angeles, CA 90010-1904 Contact: Kevin Finny, Vice Chair	 Sierra Club endorsed nominations included: Puente / Chino Hills Wildlife Corridor (a 30 mile corridor extending to the Cleveland National Forest). The boundary would include Tonner Canyon to Whittier Narrows. Elsmere Canyon, Whitney Canyon and Placerita Canyon, which would represent the last wildlife corridor between the Santa Susana and San Gabriel Mountains. This corridor would encompass the watersheds of Elsmere, Whitney and Placerita Canyons from Highway 14 to the Angeles National Forest boundary. Eastern Desert SEA linking the desert Montane transect with Big Rock Wash, Butte Complex and Little Rock Wash to Edwards Airforce Base and Rosamond Lake. Watershed area of Solstice Canyon and two tributary canyons. California Buckeye Grove on the south slope of Oak Canyon in Hacienda Heights. Western Desert SEA, which would link the San Francisquito watershed buffer with Portal Ridge to the Butte Complex and Joshua Tree Woodlands through northern drainages. 	 The proposed Puente Hills SEA embodies this nomination within Los Angeles County. These canyons have been incorporated into the proposed Santa Clara River SEA. The proposed Antelope Valley SEA embodies this nomination. This area has been incorporated into the proposed Santa Monica Mountains SEA. This area has been incorporated into the proposed Puente Hills SEA. The proposed Santa Clara River SEA includes San Francisquito Creek until it is "cut-off" by development in Green Valley. The Portal Ridge/Butte complex is consolidated with the proposed San Andreas Rift Zone SEA. The consolidation of these areas provides a connection to the Angeles National Forest. The proposed Joshua Tree Woodland SEA is not linked due to intervening disturbances

Los Angers County SEA Update Sudy SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
11-22-99 (cont.)	Sierra Club, Angeles Chapter Conservation Committee	• Increase SEA #64 (Valley Oak Savannah) to include the area along the freeway adjacent to Dale Poe Parkway.	• The existing SEA and additional area have been incorporated into the proposed Santa Susana Mtns./Simi Hills SEA.
		• Link a canyon extending from the end of Vallecito Drive in Hacienda Heights to Workman Hill with the adjacent Turnbull/Worsham Canyon SEA #44.	The proposed Puente Hills SEA includes this nomination.
		Broaden the Santa Clara River SEA to include watersheds Cruzan Mesa and Bouquet Canyon.	The proposed Cruzan Mesa Vernal Pool SEA covers most of the Cruzan Mesa region. Bouquet Canyon was not considered due to disturbance by development.
		Arroyo Sequit in Leo Carillo State Park.	This area has been consolidated into the proposed Santa Monica Mountains SEA.
		Three canyons southwest of Seventh and Orange Grove Avenues in Hacienda Heights.	These canyons have been included within the proposed Puente Hills SEA.
		• Increase the size of the Ballona Wetlands SEA.	• Existing SEA #29, Ballona Creek, was not a part of the study, and it will be retained as originally approved. The analysis of this SEA is undergoing an independent review by a joint County/City of Los Angeles Local Coastal Program study. No changes are proposed to this SEA until an assessment of existing conditions has been completed by this study. Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved. The analysis of this area is also pending an independent review by a joint County/City of Los Angeles Local Coastal Program study. No changes are proposed until an assessment of existing conditions has been completed.
		Simi Hills including linkages to Chatsworth Reservoir, Santa Susana Pass and Santa Susana Mountains.	The nominated areas have been consolidated with the proposed Santa Susana Mountains/Simi Hills SEA.
		Chatsworth Reservoir.	• The nominated area is outside of the unincorporated jurisdiction. However, the Chatsworth Reservoir has been consolidated with the proposed Santa Susana Mountains/Simi Hills SEA.
		Soft bottom portions of the Los Angeles River, Sepulveda Dam and Glendale Narrows, including linkages to the Arroyo Seco through Mt. Washington.	• "Chatsworth Reservoir, the nomination area, is currently designated as SEA #13. While this SEA was not a part of the study, because it was outside the unincorporated area, proposed modifications to the boundaries of existing Simi Hills SEA #14 has resulted in linking of SEA #13 with the

Los Angeles County SEA Update Study SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
11-22-99 (cont.)	Sierra Club, Angeles Chapter Conservation Committee	• Least Tern nesting grounds at the mouth of the Los Angeles River.	expanded and combined Santa Susana Mountains/Simi Hills SEA. • This area has not been included in the update study due to its location entirely outside County jurisdiction. The nominated area is within the City of Los Angeles. In correspondence dated October 19, 1999, the City recommended that existing SEA #33 (Terminal Island) be relocated to new land created in the outer harbor area. According to the City, this recommendation was made by the U.S. Fish and Wildlife Service, and State Department of Fish and Game.
		Soft bottom portions of the San Gabriel River extending from Whittier Narrows to Angeles National Forest.	• The analysis determined that the San Gabriel River and its tributaries are channelized; under these circumstances an SEA designation is not appropriate, though the river can be designated as "Open Space" in the Los Angeles County General Plan.
		Worsham Canyon should be fully included within the boundary of SEA #44 (Sycamore – Turnbull Canyons).	Worsham Canyon has been consolidated with the proposed Puente Hills SEA.
		Beaches and Dune remnants from Marina del Rey to the Palos Verdes Peninsula.	See California Native Plant Society.
		• Add the Liberty Canyon Wildlife Corridor to the Las Virgenes SEA to link the Santa Monica Mountains to the Simi Hills and Santa Susana Mountains.	• The undeveloped portions of this area have been included within the proposed Santa Monica Mountains SEA.
		Recharge areas of the Santa Clara River that lie outside the current boundaries of SEA #23 (Santa Clara River).	• Existing SEAs #19 and #23 along with several other tributaries to the Santa Clara River have been included in the proposed Santa Clara River SEA. Existing SEAs #20, #63, and #64 have been included in the proposed Santa Susana Mountains/Simi Hills SEA. These proposed SEAs do not include large portions of the National Forest and the entire Santa Clara River water-shed. While this study advocates appropriate watershed management practices, a field survey determined that significant biotic resources did not exist in a number of nominated areas.
		• Isolated habitats on Palos Verdes Peninsula.	See California Native Plant Society.
		Revise Malibu Creek State Park Buffer (SEA #8).	This area has been consolidated into the proposed Santa Monica Mountains SEA.

Los Angers County SEA Update Study SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
11-22-99 (cont.)	Sierra Club, Angeles Chapter Conservation	Canyon that extends from Nicoya Drive in Hacienda Heights to Powder Canyon (SEA #17).	• The nominated area is included in the proposed Puente Hills SEA.
	Committee	Wildlife Corridor extending from San Dimas Canyon and the San Antonio Canyon floodplain south through Bonnelli Park and Upper Tonner Canyon to interconnect with Puente/Chino Hills Corridor.	purpose.
		• Add north side of Castro Peak to SEA #4 (Upper Sierra Cyn.)	This area has been consolidated into the proposed Santa Monica Mountains SEA.
		Wildlife corridor extending along Mulholland Scenic Parkway to Hollywood Reservoir and Griffith Park.	• The proposed Santa Monica Mountains SEA extends east to the Encino Reservoir/Temescal-Rustic-Sullivan Canyons area. Areas further to the east were not considered for SEA status due to existing development and numerous high traffic volume freeways. The remaining area was outside of the unincorporated jurisdiction. It is important to note, however, that existing SEAs within city boundaries are not a part of the study and are being retained as originally approved.
		San Martinez Grande Canyon watershed near Val Verde	• This proposed linkage was not included due to its location in the Newhall Ranch project area. Environmental review determined that linkages further to the west within Ventura County serve this purpose; the area within Ventura County, along the Santa Clara River, is also located closer to the National Forest, which is generally not developed.
07-01-99	United States Department of the Interior Bureau of Land Management: West Mojave Interagency Planning Team 2601 Barstow Road Barstow, CA 92311 Contact: Lawrence F. LaPre, PhD	Provided the following comments: Recommend expansion of SEA #48 (Big Rock Wash); Add 160 acres Northeast of SEA #51 (Saddleback Butte); Adjust boundaries of SEA #54 (Piute Butte); Link SEAs #57 (Fairmont – Antelope Buttes), #58 (Portal Ridge – Liebre Mtns.), and #60 (Joshua Tree Woodland); Support SEAs #47 (Edwards AFB), #50 (Rosamond Lake), #52 (Alpine Butte), #53 (Lovejoy Butte), and #55 (Desert Montane Transect).	Areas nominated for expansion and linkage are consolidated in the proposed Antelope Valley, San Andreas Rift Zone and Joshua Tree Woodland SEAs.

Los Angeles County SEA Update Study SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
07-25-99	United States Department of the Interior, National Park Service - Santa Monica Mountains National Recreation Area 401 West Hillcrest Drive Thousand Oaks, CA 91360-4207 Contacts: Arthur E. Eck, Superintendent Melanie Beck, Outdoor Recreational Planner	Nominated the Santa Monica Mountains as a full Mountain range, including all existing SEAs. Stressed the importance of north-south linkages to connect with the Simi Hills, east-west linkages through the Santa Monica Mountains, and additions to core habitat areas.	Essentially, the entire mountain range, including all existing SEAs, (#3 (Zuma Canyon), #4 (Upper La Sierra Canyon), #5 (Malibu Canyon and Lagoon), #6 (Las Virgenes), #7, #8 (Malibu Creed State Park Buffer Area), #9 (Cold Creek), #10 (Tuna Canyon), #11 (Temescal-Rustic-Sullivan Canyons), #12 (Palo Comado Canyon), and #39 (Encino Reservoir) as well as linkages with the Simi Hills have been consolidated into the proposed Santa Monica Mountains SEA. The proposed SEA also includes linkages to the Simi Hills across the Ventura County line.
12-06-99	Wampole, Barbara 28006 San Martinez Grande Road Saugus, CA 91384	Nominated a corridor linking the Santa Clara River to Los Padres and Angeles National Forest lands, west of the communities of Val Verde and Castaic.	This proposed linkage was not included due to its location in the Newhall Ranch project area. Environmental review determined that linkages further to the west within Ventura County serve this purpose; the area within Ventura County, along the Santa Clara River, is also located closer to the National Forest, which is generally not developed.
12-20-99	Wildlife Corridor Conservation Authority 2500 East Imperial Highway, #201-357 Brea, CA 92821 Contact: Jennifer Schlotterbeck, Staff Analyst Additional information for the Whittier- Puente Hills SEA nomination	Nominated a Whittier-Puente Hills Wildlife Corridor (especially the areas between SEA #44 (Sycamore-Turnbull Canyons) and #17 (Powder Canyon)). The corridor encompasses existing open space within the Chino Hills & Puente Hills from the Cleveland National Forest in Orange County to the Whittier Narrows area in Los Angeles County.	As proposed, the Puente Hills SEA includes the majority of open space remaining in the county portion of the Puente Hills and Chino Hills and the natural areas of the Whittier Narrows Recreation Area and Flood Control Basin. Existing SEAs #15 (Tonner Canyon-Chino Hills), #17, #42 (Whittier Narrows), and #44 are included in this SEA with minor modifications to their boundaries.
10-22-99	Wilmington-Harbor City Harbor Lake Regional Park 221 South Figueroa Street Los Angeles, CA 90012 Contact: Anne Howell	Requested retention of SEA #35 (Harbor Lake Regional Park) (possibly reduce to just the drainage channel).	The nominated area is within the City of Los Angeles. In correspondence dated October 19, 1999, the City noted that existing SEA #35 (Harbor Lake Regional Park) is zoned as OS (Open Space Publicly Owned) and is in park use. The city also recommended deleting the area northerly of Pacific Coast Highway, due to channelization for flood control purposes as well as existing residential development.

Los Anges County SEA Update Sady SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
04-10-00	United States Department of Agriculture National Forest Service – Angeles National Forest 701 North Santa Anita Avenue Arcadia, CA 91006-2725	Expressed support of the regional SEA concept submitted by the California native Plant Society in December 1999.	See California Native Plant Society.
	Contact: Susan R. Swinson, Acting Forest Supervisor		
03-15-00	The Theodore Payne Foundation for Wildflowers and Native Plants, Inc. 10459 Tuxford Street Sun Valley, CA 91352	Expressed support of the regional SEA concept submitted by the California native Plant Society in December 1999.	See California Native Plant Society.
	Contact: Michael Sorich, President of the Board of Directors		
12-16-99	State of California, The Resources Agency – Santa Monica Mountains Conservancy 5750 Ramirez Canyon Road Malibu, CA 90265	Expressed support for the nominations submitted by the National Park Service, The Resource Conservation District of the Santa Monica Mountains, the Wildlife Corridor Conservation Authority, the City of Santa Clarita/Sierra Club Santa Clarita Chapter, and the Sierra Club—Angeles Chapter.	See National Park Service, the Resource Conservation District of the Santa Monica Mountains, the Wildlife Corridor Conservation Authority, the City of Santa Clarita/Sierra Club Santa Clarita Chapter, and the Sierra Club—Angeles Chapter.
	Contact: Elizabeth A. Cheadle, Chairperson		
02-10-00	Desert Tortoise Preserve Committee, Inc. 4067 Mission Inn Avenue Riverside, CA 92501 Contact: Michael J. Conner, Ph.D., Executive Director	Expressed support of the regional SEA concept submitted by the California Native Plant Society in December 1999. Specifically recommended SEA status for the designated critical habitat for the desert tortoise and Saddleback Butte State Park in the northeastern corner of the county.	See California Native Plant Society. In addition, a portion of the Critical Habitat Area is located in Saddleback Butte Park, which has been consolidated in the proposed Antelope Valley SEA. This study, nevertheless, recommends expansion of the proposed SEA boundaries to include the majority of the Desert Tortoise Critical Habitat Area within Los Angeles County.

